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ETHICS AND EDUCATION

BY

J. HOWARD MOORE

Instructor in Ethics, Crane Technical High School, Chicago

AUTHOR OF "THE UNIVERSAL KINSHIP"
"THE NEW ETHICS" ETC.

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PREFACE.

Two years ago the Illinois legislature passed a law requiring the teaching of morals in all the public schools of the state for 30 minutes every week. When this law was brought to the attention of teachers at the opening of schools the following September, something approximating panic prevailed. Nobody knew what to do or how to go at it to carry out the provisions of the law. Many teachers, perplexed by the necessity of teaching something they knew nothing whatever about, advocated the repeal of the law as the best way of obtaining relief. It was out of this state of consternation and doubt that this book grew.

"Ethics and Education" is a work primarily for teachers. It was written to meet the demand for information on the relation of ethics to the general educational process. Its thesis is that moral training and culture should be included as one of the cardinal anxieties of education. The subject is treated from the evolutional point of view, as all subjects should

be treated nowadays. We know more about human heredity to-day than we did 100 years ago. Human nature is not an unstained page. We come into the world with more than blank minds and helpless bodies. We come bringing with us machines, *natures*, which must be radically changed if we ever become more than mere fractions of men and women. Nearly all the woes of the world arise either from ignorance of the ways we should go or from hereditary waywardnesses which we bring into the world with us. It is as truly the function of the school to correct these inherent defects in our acting machinery and to put sign-boards in the mind telling which ways to go and which ways to avoid as it is to tutor the understanding or guide the growing body. In developing this thesis it has been necessary to enter to some extent the general fields of both ethics and education.

It is the intention to follow this work with another work of a more practical kind. I have prepared a course of study and instruction in ethics for the four years of the high school—twenty lessons for each year, eighty lessons in all—covering pretty well the field of both theoretical and practical ethics. This course I am now working out in the Crane

Technical High School. And, if everything goes well, I purpose to publish these lessons as texts in "High School Ethics." The first twenty lessons will be ready at the close of the present academic year. These texts will be suitable for putting into the hands of pupils for study and discussion. They will be illustrated.

During the past few years several works of greater or less merit have appeared for the elementary school. But there is no text in existence for the high school. Much of the matter in "Ethics and Education" may be used in the class-room, if it is first digested by the teacher.

CHICAGO, 1912.

M.

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ETHICS AND EDUCATION

I. THE SCHOOL AND EVOLUTION

WE are emancipated in spots. We have gone to extremes on some things, and utterly neglected others. Mankind is a mob. We get somewhere more by chance than through any thought-out plan of our own. Progress is without either symmetry or eyes. We have invented photography and the scientific method and are now getting ready to fly. We have transformed the reap-hook into the harvester, and the loom into the factory, and become so skilled in celestial exploration that we can tell the composition of a world so far away that it takes centuries for its light to get to us. But in the manufacture of men and women we are using the same old machinery and the same old recipes that have been used by mankind for hundreds of years. In our enthusiasm to chain the lightning and raise big pumpkins and analyze the stars, we have overlooked ourselves. If we could project ourselves into the future far enough to see ourselves objectively and with the clearness and impartiality with which we shall be viewed in

times to come, the process which we call "education" would seem so inadequate and childish, so belated and idiotic, as to cause us the most profound sorrow and amazement.

We need a Superintendent of Improvements—some one to look over the whole field of human advance and correlate the various departments, encourage the slow-footed, organize experiments, and enlighten and unify the whole. We are all whacking away at something, we scarcely know what, but with very little co-operation with each other and with still less understanding of the general ends aimed at.

Our courses of study are pre-Darwinian. They were made out in our sleep. They were conceived in that dim time when human understanding was not yet illumined by a knowledge of Evolution. They are based on the assumption that human young, in distinction from the young of all other animals, come into the world pure and spotless, and need but a chance to exfoliate. The great facts of human origin and heredity are ignored. We have known now for something like two generations that man's origin was not so shining as it was once supposed to be. But so poky are we in adjusting ourselves to new truths, especially truths of revolutionary importance, that our whole educational program still proceeds on the hypothesis that the raw material of human character is celestial.

History everywhere has come out of the night. Every civilized people can trace itself back to a time when it was represented on the earth by one

or more tribes of savage or semi-savage ancestors. The Americans and English go back to the Angles, Saxons, and Jutes, three semi-savage tribes who came to England from the borderlands of the Baltic fourteen or fifteen centuries ago. The French are the descendants of the Gauls, the warring and superstitious tribes described by Cæsar in his "Commentaries." The Germans sprang from the Cimbri, the Goths, and the Vandals, those rough, wild hordes who charged out of the north to battle with the power of Rome. And all of the Aryan races—English, French, German, Italian, Scandinavian, Russian, Roman, Greek, and Persian—trace their ancestry back, by means of common languages and traditions, to a time when they were wandering herds of homeless nomads camping and contending somewhere in the amplitudinous bowels of Asia. Go back into the past only a few thousand years and you will find our species represented by beings so different from what we are—so dimly lighted, so fierce and terrifying in aspect, and basking in such sartorial simplicity—that we would to-day run from them for dear life if we should meet them in the road.

Man did not come from the skies. He came from the jungle. We are not children of the sun. We are children of the ape. Man is an animal. He acquired his psychology in the same way exactly as he acquired his backbone. He did not originate it; it was handed to him. The great trunk tendencies of human nature are the same tendencies as those that form the foundations of

animal psychology everywhere. The instincts of sex, of selfishness, of motherhood, and of alimentation are as old almost as protoplasm.

Civilized peoples are the not very remote posterity of savages, and savages are the posterity of those bowed and unconsidered beings who walk over the earth with their faces toward the ground. Humanity is only a habit. Even elite peoples are only superficially civilized. Scratch a Russian, and you will find a Tartar underneath. And scrape off the enamel of the most pretentious of human beings, and you will come to something so uncomplimentary that it has to be kept religiously in the background. If we human beings were transparent, and could see all the thoughts and feelings that come and go in the invisible interiors of each other, and could know how anxiously we strive to show our bright parts and keep our dark parts out of sight, we would understand much better than we do now what plated beings we really are and how much more shining and desirable we are on the outside than on the inside. The great core of human nature is barbaric. Like the ship in Ibsen's "*Rhymed Epistle*," civilization carries a corpse in its cargo —the elemental instincts and passions which have been bequeathed to us by the savage and the animal.

There is no systematic recognition of this fact by educators, much less any business-like effort to cope with it. Here is animality, the biggest, sternest, and most horrible fact in human nature, yet it stands here generation after

generation without any recognition whatever in our curricula. It is as if it had never been discovered at all. For it takes no part in determining those programs of preparation which are designed to fit human young for successful living. It is a scathing comment on human understanding and a crushing demonstration of the failure of educators to perform the function which in the accidents of evolution has been allotted to them.

2. IMPORTANCE OF ETHICAL CULTURE

The greatest defect of our educational process is the lack of a moral element. Among the ancient Greeks education was primarily physical. It was a preparation for battle. Another line of culture, especially popular at Athens, led to philosophy and æsthetics. The education of the Romans was essentially military and oratorical, while that of the Dark Ages was religious. During the last 400 years the chief anxiety in education has been the development of the intellect. In the last decade or two we have added, in a hazy way, the education of the hand to that of the head. But, everywhere, and at all times, the *heart* of man has been ignored.

The teaching of the correct relations of human beings to each other and of human beings to the other inhabitants of the planet should have a

prominent place in every course of instruction designed for human young. In the name of common sense is anything more important? Does not the principal part of the immense misery of this world spring directly from our uncivilized relations to each other? It is not so much the great forces of nature—the storms, floods, earthquakes, and the like—as it is injustice, crime, poverty, inhumanity, and unkindness that fill our world with sorrow and unhappiness. It has been said that "man's inhumanity to man makes countless thousands mourn." And, we may add, man's inhumanity to not-men makes countless other millions miserable.

If it could be brought about that all the billions of beings who inhabit this sphere would refrain from all acts which would in any way mar the happiness of others, that moment the earth would be transformed. We have thousands of theories as to how to make the world better, and we struggle day and night to understand and control the great natural forces about us; but if we could only get inside of ourselves once and set ourselves to working right, the biggest step toward the Millennium would be taken. Ella Wheeler Wilcox has put this idea into one of her poems:

"So many gods, so many creeds,
So many paths that wind and wind;
When just the art of being kind,
Is all this sad world needs."

The ability to weigh the stars is all right, but it

is not more important than the disposition to be just.

Teach German, or geography, or algebra, or any other subject now taught in our schools to a class of boys and girls for a year. Then go to work and teach morals and humanity for the same length of time and with the same skill and persistence, and compare the effects of the two different kinds of instruction on the lives of those boys and girls. Is there any doubt which subject would be the most useful? A human being may be jammed full of German, or geometry, or biology, and yet be a barbarian. In fact, a being without moral character is worse off "educated" than if he were ignorant. For "education" merely effectualizes an individual's power for evil. To "educate" an enormity is to confer teeth upon a monster. Let the intellect sleep, or civilize it.

We need a new science and a new enthusiasm. We need texts and courses of study designed to correct the imperfections of human heredity. Human young should be revised, not simply intellectualized. The rational and emotional tendencies should be scientifically and systematically assorted, the evil ones weeded out and the good encouraged. Schools should be reformatories. Illumination is not enough for beings who come into the world fashioned for erroneous conduct. Cephalization is not civilization.

3. THE CALL OF THE PAST

Years ago, when we lived on a farm in the country, my father kept sheep. And there was one peculiarity of the ovine psychology which in these more thoughtful years has often reminded me of men.

The sheep were kept in a lot at night and turned out on the prairie during the day. Instead of a gate, the lot had what were called "bars." These were wooden pieces extending across the opening one above the other, and were pulled to one side when the sheep passed in or out. Sometimes, in their eagerness to get out, the sheep would begin their activities before all the "bars" could be "let down." The ones nearest the opening would leap over and the rest would follow. Before many had passed, the remaining "bars," of course, would be taken out of the way. But every sheep in the flock would jump at that particular place in imitation of those in front, even though the obstacle were no longer there.

Men are like sheep. They do things and think things, not because the things are useful and true, but because they have been done and thought by those who have gone before. They imitate their ancestors. They are chained to tradition. Look at the sheep-like procession of the generations of men. Each generation jumps over the same hurdles that

preceding generations have jumped over, although in most cases the usefulness of the activities, if they ever had any in the first place, has long ago passed away. We eat like our ancestors, reverence the same creeds, and cling to the same customs, institutions, and idiocies. Why should we have kings, and queens, and poets laureate, and wars, and etiquette, and beliefs in creation, and quail-on-toast, and millionaires, and poverty, and the study of Latin and Greek, and the dread of "13," and "styles," and gods, and criers calling from court windows "Oyez, oyez, oyez?" It is the call of the past—the oldest and most hopeless of human slaveries.

We need a new savior—one who will deliver us from the chains that are put on us in our cradle. We need a new declaration of independence—one that will emphasize the superiority of reason over inheritance as a means for acquiring new ideas. We need to form the habit of making out a new inventory of ourselves every little while, and see how much of what we are doing and believing is really worth while and how much is pure mimicry. It took us thousands of years to realize the wrong of human slavery. And I suppose it will take us thousands of years more to see the iniquity of other errors just as great which we are hanging on to to-day with such tick-like tenacity.

Human institutions are inventions. They are devices to aid in the promotion of human welfare. They should be judged by the same standards of utility as agricultural implements and everything

else. Whenever they can be made over to advantage, they should be made over. And whenever they can be rendered useless by something better to take their place, they should be sent without sighs or lamentations to the junk-pile. *Nothing is too sacred to be improved.*

Society is a laboratory. And in an ideal condition of things sociologists would be all the time studying and experimenting with social arrangements to see in what ways they might be improved. If we would devote half the time and attention to the improvement of our institutions, social, political, juristic, religious, and educational, that we do to the improvement of radishes and mowing-machines, human progress would present a more uniform and dignified appearance than it does now.

Take the marriage institution. This institution is as old almost as the Alps. Yet it never changes—except to get a little worse as the ages go by. Why does it not change? Not because it is already perfect certainly. It is because we are such ninnies that, while in certain departments of human enterprise we want to have the advantage of every improvement we can think of, in other departments we are willing to use the same old prehistoric rattle-traps to the end of time. The only condition for introducing a new design in anything should be that the new be on the whole an improvement on the old, that it serve the ends of human happiness and well-being better than that which it displaces.

Many of our institutions were invented

hundreds of years ago, and have undergone no essential change since. We are using devices in our societies to-day that were out of date before the reap-hook was ever dreamed of.

Our juristic institutions are the worst. When judges and lawyers want to decide what to do in any particular case, they never sit down and think over what would be reasonable and just and useful in the circumstances and then go ahead and do it. They go back to the time of James I. or Johonnot the Bald, and find out what they did in those times, and then do the same thing to-day as nearly as they can. Judges and lawyers are worse ancestor-worshippers than the Chinese. They will turn a man loose if they know he is guilty, if the prosecuting attorney fails to cross his *t*'s or to insert "as herein before set forth" a certain number of times in the indictment. The great judges of England cannot render a decision that amounts to anything unless they sit on woolsacks and wear long lousy-looking wigs.

Our political and industrial institutions are little better. They are the inventions of wolves. They are designed to enable those who have the whip handle to keep it. Is there anything more calculated to promote the general wretchedness of mankind than a system of industry arranged on the principle of the grab-bag, where the strong, the selfish, and the immodest get everything, and the weak and altruistic get nothing? Take that dog-in-the-manger policy which we have regarding land—allowing men the privilege

of "owning" the earth's surface and permitting them to keep the rest of the race from using it whether they use it themselves or not. If we did not go through life looking upon the fact, it would be unthinkable that sane men would invent an arrangement compelling hundreds and thousands of fertile acres to lie idle in the midst of populations that are starving to death.

Our educational institutions are not so bad as some others. They are, however, in many respects utterly obsolete. Education has never really been modernized. It has to-day essentially the same methods and subject-matter that it acquired at the time of the Revival in the 14th and 15th centuries. Its most modern features are its democracy and its provision for the normal school. It has failed to adjust itself to the expansion of industry, art and science, and to the newly discovered facts of human heredity. It is not *useful* to anything like the extent that it should be. It fails to do for society what it might do and what it is its plain duty to do.

We need to overhaul our institutional hurdles and see how many of them are useful and how many we are jumping for no reason on earth except that our ancestors to the 13th generation back have taken their exercise in this way.

4. THE EDUCATIONAL ANXIETIES

The original organ of education was the home. The mother was the first teacher. And among all the lowest societies of men and among sub-human animals, the mother is still the only teacher the child ever has. But among the higher societies of men a new organ has arisen. It is the *School*. Education has become the business of a class set apart and specialised for this work.

Educators have never realised in any but the haziest sort of way either the nature of the raw material with which they have had to deal or the function of the process which has been committed to them. Comenius thought that the purpose of education was "to restore fallen humanity to the image of God." Locke held that it was the development of individual character and personality. Rousseau was the great advocate of child liberty. His ideal was the weed. "The child for the child" was his motto. He pleaded for the development of the natural human being. Pestalozzi maintained that the education of the child is for the home, and that its education should be carried on in and by the home. Froebel emphasized play and invented the kindergarten. G. Stanley Hall is the most conscious of all educators. He defines the function of education to be the correlation of

the child with the civilization into which it is born.

Human young come into existence in an extremely unbaked condition. They are unfitted in every way for the duties of life. They are weak. They are ignorant. They are incompetent. They are filled with erroneous tendencies. They are often physically invalid.

Here lie the gardens of education. Education is the name of the process which the child undergoes in preparation for the activities of life, whatever this preparation may be, whether simple or elaborate. *The function of education is to take the raw material of human infancy and fashion it into intelligent, useful, healthy, and right-loving men and women.*

Every society should have a standard of membership. No human being should be permitted to become a member of society until he is competent to take a useful and worthy place in that society. The school is the organ which should enable would-be citizens to meet the requirements of this standard. Initiation into the privileges of citizenship should be marked by solemn rites and ceremonies calculated to impress on the candidate the serious obligations which he is assuming. Violation of the oath of membership should be equivalent to demotion. This plan would place a premium on citizenship and endow it with a dignity and meaning which are absent from it at present.

We need a new set of educational anxieties. The parent has abdicated. The Sunday School

is a reminiscence. The old system of "Thou shalts" and "Thou shalt nots" is passing away rapidly as an influence among men. Representative government is fast taking the place of monarchy. Modern industry and modern science have attained a development and complexity undreamed of 400 years ago. New revelations of vast importance have lately come to us regarding the nature of man.

The race is cutting loose from its traditional apron-strings, and is in danger of reaping large harvests of wild oats. We need no longer expect to be saved by some fatherly and athletic personage from without. We are at the mercy of our own intelligence.

Is there a science of righteousness? Can we make our way without gods? The time has come for a New Evangelism. The eyes of the universe are on the School.

5. THE PHYSICAL ANXIETY

We are a race of cripples and valetudinarians. There are few of us, within the bounds of civilization, without an ailment of some kind. Nearly every one has something the matter with him, even those in apparent health and strength. This is neither normal nor necessary.

Man was originally a wild animal, living under the open sky. He roamed the forests and

prairies like other animals, subsisting on the natural products of his surroundings, which he gathered from day to day. He was unencumbered by the long list of "necessities" which has been entailed by civilization. There were no crops nor commerce, no monopolies nor sweatshops, no tuberculosis and no toil. The nullification of the law of natural selection by the preservation of the unfit is no doubt one of the causes of the disease and physical impairment which prevail among the higher societies of men. But a more important cause has been the abandonment of the free, temperate life in the open air for the sedentary, hot-house style of living, with its luxuries and artificialities, its money hunger and its grinding toil, its unparalleled vanities, vices, and intemperance. Even birds and monkeys and other animals, compelled by man to adopt the inactive, indoor life, soon fall victims to the same diseases as man.

The human body is a machine. In order for it to be efficient and lasting, it must be fed and cared for. It must have fresh air and exercise and be used in moderation. The importance of these things, together with the physiological facts to which they are related, should be taught to human young—taught not incidentally and in theory only, but practically and in earnest. Physical training should be daily, not weekly as it is now. We will have plenty of room for it every day in our course of study if we will throw out a lot of truck that we are teaching now that doesn't amount to a hill of beans.

Ill-health is one of the biggest expense accounts of the human race. It not only lessens and destroys the power to do, but it abbreviates life, wrecks the feelings, imposes burdens on the well, and often sends terror and demoralization to all those in the immediate vicinity. In most cases the soul shares the misfortunes of the suffering body. The mind reels, the moral character is impaired, and the individual reverts sharply to the primitive type.

Health is the universe to one who is without it. It is the foundation of all human values. Yet we grow up in utter ignorance of its laws. How often we hear the lament at forty, "If I had only known at fourteen what I know now, I never would have had to suffer what I am suffering." We toil over the axioms of Euclid, and the idioms of deceased languages, and strain after dates and the names of capitals and the idiocies of orthography, as if our very lives depended upon them. But we give hardly a single serious thought to those conditions of physical well-being on which the whole universe rests.

Horace Mann said once: "I am certain I could have performed twice the labor, both better and with greater ease to myself, if I had known as much of the laws of health and life at twenty-one as I do now. In college, I was taught all about the motions of the planets, as carefully as though they would have been in danger of getting off the track if I had not known how to trace their orbits. But about my own organization,

and the conditions necessary to the healthful functionings of my own body, I was left in profound ignorance. Nothing could be more preposterous. I ought to have begun on myself, and taken the stars when it came their turn. The consequence was, I broke down at the beginning of my second college year, and have never had a well day since. What labors I have since been able to do I have done on credit instead of on capital—a most ruinous way. For the past twenty-five years, so far as my health is concerned, I have been put from day to day on my good behavior. During the whole of this period, as an Hibernian would say, if I had lived as other folks do for a month, I should have been dead in two weeks."

No human being can be a complete individual or can hope to achieve full success with a seriously defective physical organism. It is true that a number of men have attained eminence and a high degree of efficiency who have been life-long invalids. Darwin was a hopeless valetudinarian. Herbert Spencer was a dyspeptic, and often despaired of his life during those wonderful years when he was producing his masterly philosophy. Pope was a cripple, and had to be helped and bandaged like a baby. Shelley was a frail, almost-disembodied being, and had to use always a great deal of ingenuity to live. Heine was an invalid the most of his life. So was Carlyle. But these men achieved greatness, not because of their infirmities, but in spite of them. It is certain that if they had been

allotted a good physical machine they would all of them have done more and done it better than they did, and would at the same time have been much happier and more successful human beings than they were. Their success in the circumstances merely shows that some men may be weighed down with a terrible handicap and yet are able by their boundless genius and determination to rise in spite of it.

Physical integrity has a very important moral aspect. It is utterly impossible for anyone to be a completely moral being with a diseased stomach or liver or with nerves bitten day and night by mendacious toxins. Low spirits, lack of energy and ambition, "that tired feeling," irritability, and viciousness are diseases. They are the emotional correlates of physical infirmity. The question is often asked, "Is life worth living?" And one of the possible answers is, "It depends on the liver." Is your blood muddy? Are you anemic? Or nervous? Or bilious? Or ant-toxic? Then you are certain of many days and nights when the debits will be terrible!

Many things of only incidental rank show the close dependence of the mental and moral on the physical. A little swelling in the speech center of the brain will render the sufferer powerless to express a single idea. A tap on the skull sufficient to produce in the right place a slight oppression of the brain will transform the most beautiful personality into a morose and gibbering idiot. An over-acid stomach will turn a god into a grouch. A little plug in the biliary duct will blot

out the sun. A tablespoonful of castor-oil taken internally at the right time may rejuvenate the universe.

Diseased digestive organs poison and deform human character to an extent that is almost inconceivable. One of the most conspicuous instances of this was Thomas Carlyle. From the time Carlyle was 24 till he was nearly 60 he suffered from serious stomachic disorder, which not only afforded him intense pain but cast over the whole of his adult life a pall of pessimism and gloom. "Look up there," said Leigh Hunt to him one evening, pointing to the starry skies; "see that glorious harmony that sings with infinite wisdom to the human soul." "Ah, it's a sad sight," said Carlyle. At 45, in the height of his success, Carlyle wrote: "I shall never be other than ill, wearied, sick-hearted, bilious, and forlorn." A few years later he speaks of his "huge nightmare of indigestion and insomnia and fits of impatience." "I declare solemnly," said he, "that nine-tenths of my wretchedness and more than nine-tenths of my faults are due to this infernal disorder in my stomach." Carlyle was in a literary way successful far beyond his hopes. He was lionized by the fashionable and literary world. He had prospered pecuniarily. He was married to a woman eminently qualified to make him happy. Yet existence was almost intolerable to him. His stomach had turned into an acid factory.

Listen to De Quincy, a brilliant sufferer from the same malady as Carlyle: "The whole process

and elaborate machinery of digestion are felt to be mean and humiliating when viewed in relation to our mere animal economy. But they rise into dignity and assert their own supreme importance, when they are studied in their relation to the intellect and temper. No man dares then to despise them. It is then seen that these functions of the human system form the essential basis upon which the strength and health of our higher nature repose, and that upon these functions chiefly the happiness of life depends. All the rules of prudence or experience that life can accumulate will never do as much for human comfort and welfare as would be done by a stricter and more scientific attention to the digestive organs."

The very first concern of a human being should be to be well and strong. And one of the very first concerns of the school should be the health, strength, and physical perfection of the race. Children should early be taught correct habits of eating, breathing, bathing, working, and exercising. Physiology and physical culture should become one. They belong in the same department, along with general hygiene, medical inspection, and the superintendence of games and pastimes.

Physical culture, as it now exists in the public schools of this country, scarcely deserves the name. It is little more than a mere scramble for medals. It is at best beneficial to only a few. One or two per cent. of the students are trained and lionized, and the other 98 or 99 per cent. are ignored. The very ones who need physical

culture the most get the least, and the ones who need it the least get all.

There ought to be a department of education whose business it is to look after the health, hygiene, and development of the human physique, and to do it carefully and scientifically. The anxiety of this department should not be to turn out a few phenomenal athletes, but to produce a *race* of strong, healthy, energetic, and beautiful beings.

6. THE VOCATIONAL ANXIETY

The school in its origin was a leisure-class institution—an institution sustained by private funds for the benefit of the rich and royal. It was designed for priests and princes and those who were to follow professional and official careers. Education was not considered to be either necessary or safe for the masses of mankind. It was the business of the common herd to sweat. And they could do this as well without brains as with them. Moreover, if people generally came to understand things, it might cool their enthusiasm for acting as everlasting doormats for the few. Knowledge is power—and sometimes even worse than that: it is *powder*. Ignorance has always been a necessity to those harpies—Crime, Tyranny, and Superstition—which work at night.

This primitive scheme of education still prevails in Russia and other belated parts of the world to-day. The great mass of the Russian people live and die in profound darkness. But in this country and in most of the other up-to-date countries of the world educational privileges have been extended to all. We have, as we say, *democratized* education. Schools are maintained at public expense, and are open to all, rich and poor alike. Private education has taken a back seat. We have done for the school what we have done for the mail business and the highway—we have socialized it, and made it co-operative. We have done with it what we will do with all our interests when we get a little more intelligent.

The first public schools were elementary schools, which were established in England and in this country in the early colonial days—the so-called “grammar schools.” While these schools were supported by the state and were called public schools, they were open to boys only. For 150 years after the establishment of public schools in Boston, girls were entirely excluded. Later came the public high school, taking the place of the private high school. And during the last 30 or 40 years we have, in America, been busy establishing public colleges, or state universities, as we call them. But college education is still largely in the hands of private institutions. The final step in the completion of our American public school system consists in the sowing of public universities over the country generally—not one in each state simply, but one or more in

every community with enough young men and women demanding university training to justify it.

The important fact to be noted in this connection is, that *while we have universalized the privileges of education, the form and contents have remained essentially the same.* We are still using for the education of mankind in general the curriculum prepared for princes and professors, although 49 out of every 50 human beings will never be either princes or professors, and hence will never have any more than incidental use, if any at all, for this sort of training. It is ridiculous. No person in his senses would invent such an unserviceable scheme to-day. It is simply one among the thousands of instances which we see everywhere about us, where men continue to do a thing in a certain way merely because it has been done that way in the past.

We have not democratized education really, as we have for a long time been so active in believing. Democracy in education does not mean opportunity for all to prepare for the same thing, but opportunity for each to prepare himself for the career of his choosing. Schools are not democratic so long as they serve only an insignificant fraction of the entire people. It would be as appropriate to arrange our educational programs for those who wish to enter journalism, or go on the stage, or raise ostriches, and call it democratic because the privilege is open to all, as to call the present one-sided system democratic.

We should provide for the educational rights of the great mass of mankind who cannot go to

the top. Emphasis should be placed on the elementary school—that part of the educational system where the masses of men get their education. The ideal would be for the public to provide not only buildings and teachers and books and apparatus for all, but also food and clothing and leisure, so as to enable *all* to devote the years of childhood and youth to the business of development. But this would necessitate not only co-operative education, but co-operative industry as well. And we have not got that far yet.

The public school system, as it exists to-day, is composed of a series of links. Each link is dependent upon the others for usefulness. The elementary school is a preparation for high school, the high school is a preparation for college, and the college is a preparation for original research and other aviaational activities of greater or less importance. It is necessary to belong to that exceedingly small fraction of the human race who want to be eagles in order to get anything like the full benefit of the school system. According to the United States Bureau of Education only 12·6 per cent. of the boys and girls of this country ever enter the high schools, and nearly three-fourths of these fail to finish the high school course. According to the same authority, less than one person in fifty ever enters the college or university. And yet it is for this insignificant fraction of the population that the public school system primarily exists. In the name of common sense, why should the elementary schools be primarily a preparation for high school when only

one in ten goes to the high school? And why should the high school be a preparatory school for college, when only one in six of those who use the high schools ever enters the college?

Let the elementary school continue to be a preparatory for college for those who have the time and inclination to go to college. But by all means let the elementary school be something different for the 87½ per cent. who never go to high school, but who leave the elementary school to enter directly upon the duties of life. And let the high school be arranged primarily for the great mass who never go on to college, not for the exceptional individuals who do go on. The elementary school, the high school, and the college should be *units* as well as *links*. They should be independent of each other as well as dependent upon each other. For those who cannot or will not go to high school the elementary school should have a completeness of its own. And the high school should be complete in itself for those who do not go to college. This alone will afford that educational democracy which we in our simple-mindedness have all along supposed we already had.

There are too many blind alleys in our educational labyrinth—too many avenues that lead nowhere in particular, and which land the wayfarer finally in the midst of a vast expanse of landscape and sky with nothing definite in it but a horizon. Have you ever followed a strange road through a strange and unknown country, on and on, over hills and along valleys, and seen it

grow dimmer and dimmer as you went on, until at last it faded to an indistinct trail winding weakly off over the lonely prairies toward the sunset? Well, I have. And I imagine it is with some such mingling of hope and bewilderment that boys and girls often pursue their education, and with some such feeling of dismay that they at length stand gazing at the educational cow-path crawling dismally off over the landscape of life, before finally turning away in despair to find some other way to where they want to go.

Every normal member of a specialized society of living beings should be qualified to perform some useful part in the work of that society. The ability to handle something with success (a plow, a plane, a law case, a gang of men, an artist's brush, a business, a locomotive, a department of government, *something*) is essential to the usefulness of every human being. This ability should be taught in the public schools. No boy or girl should be permitted to grow to physical maturity without having in the meantime acquired the ability to perform well some function, industrial, commercial, professional, or official, in the social organism to which he belongs.

If parents are not able to maintain their children in school, the state should do it for them. Nothing the state could possibly do would be more profitable than to provide for the thorough and systematic education of every citizen. The losses to the state to-day from our slip-shod methods of education—the loss from the lack of skill and intelligence in all lines of activity and the loss

through vice, crime, ill-health and corruption—are simply incalculable. Our present system of industry, resulting as it does in its mountains of wealth on the one hand and its Saharas of destitution on the other, has many horrible aspects. But I cannot think of anything connected with it more horrible and pathetic than the fact that it dooms millions and millions of children to lives of ignorance and semi-slavery by compelling them to lay their little faces on the grindstone of toil before they have had a chance to get an education. The great mass of men never bloom, never unfold. They spend their days in the twilight of the mind. Why? One reason is that they have not time. There are too many private yachts to be maintained, and too many private touring-cars that have to be kept going over Europe, and too many hundred-dollar-a-plate banquets that have to be provided for. The great mass of mankind, from the time they get out of their cradle till they get into their coffin, do nothing but hustle for somebody else.

Every human being should feel it a duty to do something useful in the world, and to do what he does do to the best of his ability.

The school of to-day is turning out too many tramps—too many who have gone into it with the idea that if they would get an education it would enable them to have an easy time. This is wrong. It is a survival of leisure-class ideals. The only thing in this world that is honorable is *service*. And *all* service is honorable. The young should be taught that education is to enable them to *do*

things and be *useful*, *not* to get out of doing things. The days of the human tape-worm are not numbered, but they ought to be. The human parasite is a criminal.

The public schools should actually fit human beings for doing things, not merely afford them opportunity to exercise for a time in general handicraft and then turn them out without qualification for anything in particular. One would almost think from the blank and aimless character of our education that it was never intended to be of any real use to anyone, but merely to be a series of undifferentiated exercises designed to occupy and divert the young while they are in the act of getting big enough to begin the business of life.

The public school should do for all what it now does for those who wish to teach. It should provide definite highways leading to all the occupations of life. The public school should be the nursery of society, where every variety of human being required by society is cultivated. Boys and girls leave school often because they do not find the roads leading to where they want to go. They look ahead and they see nothing but long, toilsome trails ending in altitudinous professions and Ph.D.s. They do not want to go to the clouds. They have neither the time nor the ability to do so. Nor are they so constituted that they crave intellectual exercise as such. So they drop out of the school to prepare the best way they can to do anything they can. They become recruits in that vast, undifferentiated,

occupationless, and forlorn mass of mankind who begin the active operations of life by starting out to hunt for a "job."

The manual training and household arts in the schools to-day are a beginning in the right direction, but only a beginning—only the first vague suspicions of what the public schools should do in preparing human young for the work of life. Manual training was introduced into the schools in response to the feeling that education was too bookish, that it failed to provide adequate opportunities for expression. But those who introduced manual training into the schools made the mistake of substituting an artificial end for a real one. Manual training is much better than nothing. But it is very inferior to what the schools ought to provide and what they will provide in a few short years.

Education should be useful. It should be so plainly useful that boys and girls could see distinctly that it is the way to success in life, and would take to it eagerly. There is something wrong when education is so distasteful that it requires a large part of the teacher's energy to keep her pent-up and mutinous pupils from organizing a trek to the play-ground. Mental exercises should be sandwiched among industrial and physical exercises and with play in such a way as to give zest to all. Boys and girls are pretty live animals—especially boys. And school life should contain opportunities for them to blow off steam. It is a crime to nail children to their seats for hours at a stretch without a

chance for even a full-sized wriggle. It is like caging birds.

The activities of the school should be so balanced and natural as to afford to the young a full rounded existence. Childhood and youth are the longest, sweetest, and most heavenly parts of human existence. They should be *lived*. Rousseau was right. Education should not be a martyrdom. It should be *life*. It will always be necessary for the child to sacrifice some of its satisfactions for the sake of the future. This is no more than it will have to do to the end of its earthly journey. We pay a price for everything. It is a misfortune of our lives that we must continually sacrifice some things for the sake of others.

The school of to-day is too sequestered. It is off in one corner. It is not in touch with life and the actual concerns and activities of the world as it should be. There is too much pursuit of knowledge for its own sake. The school, the home, the farm, the factory, the counting-house, the studio, the office, and the library should all touch antennæ, should all conspire in the great work of getting the rising generation ready for place and citizenship in the world. Education should include apprenticeship in all of the offices which the young are to be called upon to discharge in after life, not omitting manners and the proper relation of the sexes.

There exists in this country to-day a very wide and urgent demand for industrial training in the schools. The manufacturers are asking for it

because of the increasing difficulty they have in getting skilled artisans to carry on their business. There was a time when a boy entered life with his hand in his father's. He grew up as an apprentice in the business which he was later to manage. That time has gone by, and will never come back. These are big-business times. Business has become enormously specialized. It requires of those who enter it a technique utterly undreamed of by the young men and women of a generation or two ago. The labor unions are advocating industrial training in the hope that in this way they may protect their children from the fate that has fallen to them. Teachers are generally in favor of it because they are tired of making it their professional duty to force upon the rising generation something which the rising generation persist in regarding as a "gold-brick." Philanthropic and charitable organizations are urging it in the hope of protecting society from the vice and crime of unemployed ignorance. These societies have already secured the introduction of industrial training into asylums, reformatories, and penal institutions.

In response to this demand for industrial training, what are called part-time schools have been organized in some places, where the boys give one-half time to school and one-half to work in the shops. The boys are paid for their work and are promised permanent employment when they are ready for it. This method has the advantage of combining *earning* and *learning*,

which is a very great one. It also gives the boys actual experience in the work for which they are preparing. But it has the disadvantage of invalidating to some extent the public character of the school. Labour unions have been disposed to shy at it, because it creates the possibility of converting the public schools into what has been termed "scab-factories."

The introduction of actual industry into the schools is coming. And it is a step in the right direction. It should be recognized, however, that it is not the final step. The ideal school is not the industrial school, nor the commercial school, nor the agricultural school, nor the normal school, nor the art school, nor the professional school, but the *vocational school*, where all the functions performed by society are provided for and taught. This would be educational democracy, and nothing short of it will be true educational democracy. Schools should not be industrialized merely, nor commercialized, nor professionalized, but *vocationalized*.

We are at the very threshold of a radical reorganization of the public school system. New and powerful incentives to education are to be added to those already in existence. Education is to become not only useful and indispensable to success in life, but there is every reason to believe that we shall be rational enough to hitch up the energies of the young to productive public industries the benefits of which will be shared by the young who furnish the labour and the community which provides the facilities for carrying

on these industries. No greater attraction could be added to education than to provide the means for boys and girls to *earn* something and *learn* something at the same time. The great exodus from the public schools is in the 5th, 6th, and 7th grades of the elementary school, and it is here or hereabouts that differentiation should begin.

One of the duties of the vocational department of the public schools should be to advise with boys and girls and young men and women in selecting their life work, teaching them what activities there are and counselling with them as to their desires and as to their fitness and unfitness for available occupations. *The School should be the great employment bureau of society.* The practice we now have of letting the young grow up with only a hit and miss preparation for life and then turning them out into the wilds of our capitalistic society without any systematic co-operation between the sources of supply and demand is one of the masterpieces of contemporary stupidity. Many a frazzled-out member of society owes his failure in life to no greater misdemeanour than the mere failure to make connection with his calling.

Abolish the cul-de-sacs of education; open avenues that lead somewhere, and everywhere; provide variety to suit the circumstances and talents of all, but all ending in definite vocations; establish school industries of all kinds and let the boys and girls share with the state in the benefits of these industries; and the per cent. of those who

really use the educational highways will not be so appallingly small.

7. THE INTELLECTUAL ANXIETY

Human young, like the young of all other animals, come into the world empty. They should be filled. They should be taught the knowledge which the race has picked up in past times regarding the world of things in which we find ourselves. The ideal man or woman is not a cog—a being who can do something well but who is ignorant of everything else. Behind every hand and eye and body should be knowledge and understanding. Behind all art should be science, philosophy and enlightenment.

The first step in the acquisition of knowledge is the exercise and training of the perceptions. The raw material of all consciousness consists of impressions made through the senses of seeing, hearing, smelling, tasting, and feeling. It is of the utmost importance that these impressions be true. In order for them to be true, they must be acquired by direct experience with things. The first years of every human being should be spent in the country, where he can see, hear, taste, smell, and handle the universe at first hand—if not in the actual country, then in that improvised substitute for the country which we call the kindergarten.

It is a crime to start a child to learning to read and write as soon as it is out of the cradle. We should *get* ideas before starting on the business of representing ideas. We have gone to seed on symbols. Reading, writing, and ciphering are difficult arts. They should come at a more mature age of development. The education of the feelings and perceptions should come first. It is much more important that human young should feel and act correctly and be able to do things than that they should acquire facility in recognizing a certain collection of marks on the blackboard as standing for *cow*.

Much of the vagueness of the human mind is due to the fact that the mind is so largely composed of material derived second-hand from books. The ideas are not real. They are not true pictures of the things they stand for. They are effigies—mind-made ghosts of ideas. It is the preponderance of these effigial ideas which makes so many minds shadowy and metaphysical. If you want to have a clear mind, you can't afford to feed it on fog. To begin with words and definitions is to start in the air, and get nowhere. It is the method which was so popular with the word-jugglers of the Middle Ages. The metaphysician builds on definitions, which he draws out of his own mind. The scientist builds on the ground—on the actualities as they present themselves to him through his senses day by day. And upon these actualities, by induction, he rears his superstructure of inference, law, and philosophy.

The young should be taught to think, and especially to *doubt*. Skepticism is rare even among adults. The human mind is composed for the most part of error. Human history is one long record of disillusionment. Things look differently, and are different, when inspected from a different point of view. There are two sides to every story. We have no logical right to form an opinion on anything until we have been on all sides of it. It is said that Hume became a life-long atheist by being called upon on a certain occasion when a young man to take what seemed to him at the time the wrong side in a debate. We ought, as a matter of fact, to take tentatively "the wrong side" of everything that comes up, looking up the evidence on that side, packing up our prejudices and taking them over on that side, and, in so far as it is possible to do so, actually realising how it seems to regard that side as "the right side." We ought to make a regular practice of imagining ourselves mistaken. If men in past times had done this and had taught their children to do it, we to-day would not be still camping on the outskirts of animality scarce a day's journey from the jungle. But our ancestors, poor souls, were very much like ourselves. They were too busy poking out the eyes of those who could see better than they could to make much of a speciality of getting their own eyes open.

8. THE ETHICAL ANXIETY

Human nature is defective. It is selfish. It is cruel and revengeful. It is a product of militancy and hate. It is much better adapted to a fighting life, in which it was generated, than it is to co-operation and peace.

Every being is incomparably precious to himself. This is the most mournful feature in human psychology. We did not invent it. It was handed to us, along with our five fingers and our fondness for eating. It is older than the backbone. It has been the chief cause of the enormous misery that has cursed this sphere from the beginning. It has been the anxiety of moralists in all times. It is the physical calamity of the animal kingdom.

It should be attended to. The failure to remedy this defect is the crowning educational mistake of the ages. It would seem unthinkable, if we were not actually looking upon it, that men and women should labour century after century for human amelioration and overlook completely the one thing more than anything else needing correction.

Ethical culture should do for human character what physical culture should do for the body. It should produce a race of kind, honest, courageous, public-spirited, and justice-loving men and

women. It is all so perfectly plain. Men are moral invalids. They come into the world bearing the curse of their animal origin. They are unfit for a life of love and co-operation. The defects of human character are as well known and as well understood as the defects of the human body. They are the cause of more unhappiness to mankind than any other one thing. They can be corrected by the application of the same remedies that have proved so efficacious in the case of mental and physical defects. The school should be the mental, physical, and moral infirmary of society.

Children should be taught the nature of right and wrong. They should be made familiar with themselves. They should learn where their natures came from, and why they do the things they do. They should understand that the immaturity of their characters is as natural as the immaturity of their bodies, and that, if they grow into noble and god-like beings, it will require care and determination. They should be told plainly that they did not come from heaven, but that they should do the best they can to feel and think and act as if they had done so. Human acts are the expression of impulses within which prompt these acts. Children should be informed that the impulses within them have not been selected and placed there by a divine and all fatherly architect, but are the product of natural processes. The same processes which produced man produced also the cockle-bur, the mosquito, the rattle-snake, and the blizzard.

Children should be taught the *use* of morals. They should be taught that morality is merely a general name for those rules of association which men have found necessary to beings living together in a state of mutualism. They should be taught the impossibility of the survival of a society where any considerable number of individuals victimize the rest. They should be taught the art of sympathy by careful and systematic training of the imagination. No man can act rightly unless he feels rightly. And no being with the disposition to magnify his own interests and to minimize the interests of others will ever respect the interest of others voluntarily, unless he has the power to put himself in the place of others and to reproduce their sufferings in himself. He will then refrain from the imposition of wrong because it lessens his own sufferings. Kindness, courtesy, justice, honesty, love and respect for others, charity, moral courage, the kinship of all—these are all forms of *altruism*, and depend for their vitality on the art of putting oneself in the place of others.

It is the duty of the school to teach these things—the school in co-operation with the home. If the teacher and parent do not do it, who in the universe will?

Civilization is a sham. It is a mere name. It scarcely pays. Look at our jails and police courts, our armies and navies, our poverty, corruption, and inhumanity. Look at the crime among the young in these latter generations. It is increasing at an appalling rate. This shows

that we are not doing for the young in a moral way even as much as we used to do. Just the other day Judge Newcomer of Chicago said in a public address: "The most staggering fact that confronts the student of criminology in Chicago is the fact that from 65 to 70 per cent. of the criminals going through the courts are mere boys from 16 to 25 years of age. This is the most positive evidence that this great city is not developing morally as rapidly as it is physically and mentally." The reports submitted to the International Prison Congress which met recently at Washington revealed the same appalling conditions in all the large cities of the world.

It is time we were devoting a little of our inventive genius to the improvement of human character. We must begin at the beginning. We must iron out the savage and the animal in the plastic years of infancy and childhood, when alone it is possible to do so.

And sometime, maybe, we will go further back yet and take a still broader view of the regeneration of man. Instead of pouncing upon human beings when they come into the world and trying to make something out of them, we will have them born so they will not need to be pounced upon. Instead of *correcting* the defects of heredity, we will *prevent* them. We can produce fine men just as easily as we can fine cattle and carnations. Give me the power to determine who shall take part in the production of new generations of men, and in a few hundred years

I will produce a race of gods. It would require no more ingenuity to make divine men than to make green roses. If I had the privilege of selecting some one single innovation in the arrangements of men, and were assured that I could select only one thing, but that whatever I chose would be carried out, I would put into practical operation the science of human *Eugenics*. The control of the power of producing new beings is the thing which in time to come is going to actually bring about the long-prayed-for conversion and salvation of the human race.

Man is but a single sector in the great circle of sentient life. The human species is one among a million or two of species inhabiting the earth. The beings below and around us have had the same origin as we have. They have the same general architecture of both body and mind, and are footballed by the same antithetical impulses of pleasure and pain. Whatever the beings of this world have been in the past, they can never again be anything but a *family*. Universal ethics is a corollary of universal kinship. Moral obligation is as boundless as feeling.

These wider relations and obligations implied by evolution should be included in every program designed for the amelioration of the world. To ignore them is to classify ourselves as incompetents. No one but an inferior can any longer maintain that kindness, justice, sympathy, love, honesty, humanity, and charity are not as good for dogs, horses, and fishes as they are for men ; or that cruelty, hatred, and inhumanity are not

the same damning things wherever they fall on living souls.

Man has always been a provincial. The great defect in both human thinking and human feeling has always been the absence of universality. Human history is one long struggle for emancipation from the parochial mind with which man began. There has been a slow but gradual widening of the waves of sympathy, from those tribal times, when men recognised no moral obligation to anyone outside their own tribe, to the present, when the highest of mankind are international in their sympathies. The further expansion of sympathy and understanding to include not-men is inevitable. It is actually taking place to-day with a rapidity which future historians will regard as phenomenal. We should recognize these wider relations in a frank and intelligent manner, and include them in all our enterprises for the betterment of our sphere.

9. CAN MORALS BE TAUGHT?

It is a common-place that it is not possible to teach morals—that if we get them at all it must be in some such sub-conscious way as we get the measles. Another common-place is that morals are already taught in the schools all the time. And not infrequently the same individual is found promoting both of these common-places at the same time.

Ethical culture is more than the training which comes from telling a child to sit down or stand up or apologize or be punctual. These things are well, but the effects are superficial. They are merely supplementary to what should be taught in order to lay in the minds of the young anything like a firm basis for civilization. The mainsprings of human character lie in the great centers of feeling and conviction, and these are left untouched by mere formal obedience to school rules.

Children should be taught the *science* of ethics as well as the technique. They should be taught *why* they should do certain things and *why* they should refrain from doing other things. They should be taught the *utility* of truth, honesty, kindness, and the other excellences of life, and the *inutility* of their opposites. They should be supplied with moral standards and moral ideals to act as anchors in times of storm. They should understand what they are composed of and where the various ingredients in their composition came from. Teach these things to the young, along with a knowledge of the nature of habit, and you will lay a foundation for character and civilization which will be as rock to quicksands, compared with that incidental training derived from mere conformity to school rules.

The assertion that it is impossible to teach morals, except by example or implication, is an assertion that has been made by somebody in the past and has been passed around ever since without ever having been challenged or

investigated, like a great many of our other so-called truths. Kindness, honesty, humanity, truthfulness, and moral courage can be taught to young minds just as easily and effectively as Latin or arithmetic. All that is necessary is to begin early enough, use ingenuity, and keep at it. It is not possible to teach morality to all with complete success. Mournful as the fact is, there are beings born with such a wealth of evil impulses, with such an aptitude for doing the wrong thing, that the most determined efforts to correct them are futile. Happily, however, we are far enough along in our evolution for such beings to be exceptional in the human race and not the rule. There are also boys and girls who cannot learn geometry to save their lives. Yet we go on teaching it for 200 hours every year, even though our teaching often lands in stony places. We cannot hope to make every human being healthy and athletic, even with the best methods that we can think of now. But this should not weaken our faith in physical culture.

As a general rule, anything can be taught to the young mind. A child is a tin-pail setting out under the drip. It catches everything that comes along. The power to choose, the power to accept some things and reject others, is acquired later in life, if at all. All one needs to do in order to see that these things are true is merely to look around a little. The most foolish ideas and the most useless and idiotic ways of acting are every generation fastened on men by the million. Traditions, directly opposed to both reason

and common sense and utterly at variance with facts observed every day of our lives, are passed along the generations with a loyalty that would scarcely be excelled if our shoulders were surmounted with sheep's heads.

We have never tried to teach morals and humanity. We have been content to preach them, which is a very different thing from teaching them. Everything else that has ever been done or thought of, in the heavens above or in the earth beneath, has been taught, and with the most brilliant and appalling success. And with the same science and persistence we can teach those truths and ways of acting which are the very vitals of order and civilization.

The time when character should be revised, the only time when it can be revised, is in the ductile days of childhood. The child is clay. The adult is rock, or nearly so, the degree of solidification increasing usually with the passing years. Few beings are free after about twenty-five or thirty. The trunk tendencies of the mind become established by that time and we settle down to the vocation of going round and round—of repeating heroically and with machine-like precision the refrains which we have learned in the formative years of life. "Give me the child," some one has said, "and you may have the man." He was a psychologist.

William T. Hornaday hits the nail on the head in his "American Natural History" in a reminiscence regarding the mourning-dove :

"To me the mourning-dove has always seemed

a sacred bird," says he, "and although I could have killed thousands of them, I have never taken the life of one. When a very small boy at my mother's knee she related to me the story of the winged messenger sent out by Noah to look for real estate. She told me that doves were innocent and harmless little birds, and that I must never wrong one in the least. Had my good mother issued an injunction covering the whole animal kingdom, I think I would have grown up as harmless to animals as any Hindoo; for her solemn charge regarding mourning-doves has always seemed as binding as the Ten Commandments. I mention this in order to point out to parents and teachers the vast influence they may easily wield in behalf of our wild creatures, which are in sore need of protection."

I have myself always had a strong prejudice against sand-burs. I got it, along with my fear of strangers, from my father. Father always waged a relentless war on weeds, and succeeded in keeping his farm comparatively free from them. He would have been entirely successful, I suppose, if it had not been for less careful neighbours, a certain portion of whose abundance annually drifted in on the winds or came down Rock Creek in the arms of freshets. Father's *bete noir* was the sand-bur. He never came across a specimen of this plant but he would stop and pull it up. And if there were any burs on it ripe enough to grow, he would carry the plant to the house and burn it. He taught my brother George and me as little shavers that we must do the same thing.

He told us that the sand-bur was the worst of all weeds, and that if it ever got fairly started once it was almost impossible to get rid of it. We caught the enthusiasm, and our young minds pictured the world in danger of being overrun by sand-burs. We never came across a sand-bur, whether at work or play, without destroying it. If there were burs on the plant, we carried the plant home and burned it in the kitchen stove. If we weren't going directly home, we would pull the plant up and get it on our way back. Sometimes, when there wasn't any other way to do, we would pull the plant up and then sit down and take the burs in our mouths one at a time and chew them, in order to disqualify them for growth. I can remember many a half-hour spent there by the brook-side among the long corn rows, munching those porcupine-like seeds. And although it was an exceedingly painful performance, I would gladly go back there this minute, if I could, and chew again those prickly burs, if I could only feel again for one half-hour the boyish blood in my veins, and dream those happy dreams, and see father and mother and the great strange world with the eyes of a little, care-free, sunny-faced, barefoot boy. It is so lonely and sad and terrible here on these lean peaks.

There is a time in the life of all of us when a thing does not have to be true in order for it to be believed. It is merely necessary for some one to say that it is true, and it is accepted and cherished just as if it were true. At the age of four or five we believe everything that older people

tell us. That is why traditions have such a terrible time dying. That is why we have, mixed up with our thinking to-day, so many barbarous and absurd ideas. We have inherited them from the past. They were fastened upon us in our unsuspecting years—those years when, like little sightless birds, we swallowed whatever was put into our mouths. These notions are too absurd ever to have been originated by us. But we can inherit them after they have been originated, because we inherit, not what is true and beautiful and good alone, but whatever is presented to us.

Altruism is developed in individuals in the same way as it has been developed in the race—by *selection*, selection among the ideas, habits, and impulses of which individuals are psychically composed. The mind grows on what it feeds. It is nourished primarily through the senses in all the earlier years of life. The ability to control what goes into the mind, especially during the formative years, is a lever by which we can move the world. Habits form and are broken, and impulses develop and decay, by use and disuse. It is a psychological law. The oftener a state appears in consciousness the more likely it is to recur and the greater the probability that it will become habitual. This is the most important fact in the psychology of advertising. Advertisers know from all sorts of experience that it pays every time to keep the name of what they want to sell prominently and constantly before the public. Their plan is to have the public “get the habit” of having an idea of their goods in

mind. They will spend hundreds of thousands of dollars advertising an article before they ever attempt to actually exchange the article for money. They know from the nature of the human mind just about what effect in dollars and cents will finally be produced. What we teachers need to do is to advertise the ideas and principles of morality until the young get the habit of correct conduct. And it would be just as scientific to advertise moral principles on bill boards as it is to instil the virtues of "grape nuts" in this way.

Every time a tendency is exercised it is invigorated. And every time it is ignored it is weakened. Any tendency may be developed or atrophied by being systematically refreshed or starved. A lie will acquire all the verities of truth if it is repeated often enough.

A human being comes into existence. He is endowed with a certain set of tendencies to feel and think and act. He is burled into the world in a certain direction. What he is fifteen or fifty years later depends primarily on the environment in which he passes these years—depends, in other words, on what tendencies the environment is disposed to encourage and develop and what it is disposed to discourage. Everything that grows, whether it be a tree, a personality, a grass blade, or a race, starts with a certain hereditary trend, and what it becomes depends on the particular niche of the universe in which fate flings it. If an acorn comes up under a sidewalk or in a desert, it will be a very different thing

from what it would have been if it had exfoliated in its native forest. The hereditary factor is the same in each case. The differences in the end product are due entirely to the circumstances which accompany the organism through life. Take two human infants exactly alike in every respect. Let one of them exfoliate in Boston and the other in Timbuctoo. The result will be in sixty years two human beings so different from each other in mental contents and in ways of thinking and acting that if they were brought together each would be a *foreigner* to the other, with foreign feelings, ideas, interests, appearances, and languages.

Heredity and Environment are the two factors of Fate—the clay and the potter respectively of our poor human nature. Environment, happily, is largely under human control. And of all the elements in human environment, the most influential and determining, or that which *should be* the most influential in determining, is the *mother-teacher*.

10. THE CONTENTS OF ETHICS

Ethics is the science of conduct—the science of right and wrong—the science which teaches us what is proper and what is improper, what we should do and what we should refrain from doing, in all the relations of life; in the home, in

the school, on the street, in business, in society, in city and state. Ethics includes also a knowledge of the proper and improper ways of acting toward the non-human inhabitants of the earth.

But ethics is more than knowledge of ways of acting. It includes training of character. We often know what is right, but do the opposite. Ethics includes a knowledge of how we may so amend and develop our acting machinery that when we know the right we will invariably do it.

The inhabitants of the earth are all alike in one particular—they are all striving to experience pleasure and to avoid pain. Early in the evolution of living beings, these two opposite forms of experience were hit upon as the determinants of conduct; and the plan worked so well that it has been continued ever since. It is an excellent scheme in a world where simple survival is the main thing. It promotes earnestness. But it is inconvenient, to say the least. And it ought to be changed if there could ever be found a way to do it.

The inextricable way pleasure and pain are mixed up with each other in this world is a mournful fact to beings who are all the time striving for pleasure alone. In the ideal world there is no pain, no misery. There is nothing but happiness. But in our world pain seems to have been the original feeling, the first one to appear in the evolution of sentiency. Pleasure is a sort of after-thought, a secondary attribute of consciousness which developed later as an aid to pain in keeping living beings straight. Pain

is a whip, a penalty. Pleasure is a reward or bribe. Pain is a curse. We are all the time trying to minimize and escape it. In an ideal world the inhabitants never have any impulses that drive them to improper acts. All their impulses are good. Every act is proper and right. Ideal beings need only to live and act in order to be happy. We are not ideal beings. Our world happens to be one affording almost unlimited opportunities for improvement.

Those things, thoughts, beings, acts, and instincts which help us to the pleasurable experiences of life we call *good*, and those which deprive us of pleasure or which bring upon us painful experiences we call *bad*. This is the supreme standard—*Utility*. Is the thing, thought, being, act, or impulse *useful*? Does it lead directly or indirectly to happiness and well-being? If it does, it is right, proper, and good. If it does not, it is wrong, improper, and bad.

Men have never differed very much as to the doctrine that happiness is the end of endeavor and the test to be used in determining the ethical quality of everything. The doctrine fits human nature too well for that. But they have differed in their estimates of the relative values of the various pleasures and pains of the world. There has been a very decided tendency for each individual to consider his own pleasures as much more valuable and important than the pleasures of others. The existence of so many different standpoints all differing from each other in the over-valuation of a particular set of experiences

has introduced into ethical science an enormous amount of contradiction. Many men, too, have believed that post-mortem pleasures far surpass the pleasures of this world in both numbers and intensity, and have foregone the scanty handout which this world affords for the hope of greater pleasures beyond the grave. Others have acted on the assumption that a bird in hand is worth two in the bush, and have rated the attractions of this world higher. And so it goes.

We must objectify ourselves if we wish our judgments to be worth anything. We must take bird's-eye views of things. The personal equation is the great invalidating element in human reasoning. We must be disinterested—not disinterested exactly, but as much interested in others as we are in ourselves. In extreme egoism an act is estimated to be good if it produces happiness to the self, regardless of the pain which it causes to others. And an act is rated as bad if it causes harm to self, regardless of how much happiness may have been given by it to others. Napoleon Bonaparte was one of the most selfish men modern times have produced. He believed that the French Revolution was in itself one of the most horrible and uncalled for events that ever happened. But he considered it a good thing in the circumstances, because it enabled him "to catch a throne." At the other pole of human nature stands the martyr who sacrifices everything that is personally dear to himself in order to serve others.

The well being of others is on an average as important as our own, and should as a general

thing be appraised at the same value. If a certain amount of happiness is scheduled to fall to the lot of the earth, it makes absolutely no difference whether it falls on me, or on you, or on somebody a thousand miles away. It would serve the ends of absolute ethics quite as well if it fell on an insect or a horse as if it fell on a man. The only important thing from the standpoint of universal good is that the pleasure be experienced. It is not important what particular individual or species is the beneficiary. It might even go to another world, and be just as satisfactory to a universal well-wisher, who looked at Cosmos from the serene altitudes of pure reason, without any prejudices whatever one way or another in the matter. This is the ideal. It is a long, long way from our natures. But only in so far as we approximate this ideal do we rise above those imperfections of our being which have been ground out by the methods that have operated in the development of life on earth.

When we get off on one side so that we can really see it as it is, selfishness is exceedingly immodest. To be all the time thinking of ourselves and preferring ourselves to others—how indelicate and boorish! All our compliments—kind, generous, unselfish, loving, public-spirited, gentle, philanthropic, self-sacrificing, etc.—are for those who do not do these things. And this is encouraging.

The end of conduct is not the happiness and welfare of oneself, or of one's family, or one's town, or one's country, or even of one's race, but the welfare and happiness of all beings, including

oneself, the welfare of the world, of the universe, including the generations to come as well as the beings of the present.

Ethics includes a knowledge of these things. It includes also a knowledge of the rules and laws, both moral and governmental, that have been framed by men as guides to correct conduct, and a knowledge of the application of these rules and laws to the various relations in the school, the home, society, the state, business, and government. It includes a knowledge of the proper relation of the human sexes. It includes a knowledge of the ideal character and of the traits which compose it—such as sympathy, courage, self-control, self-reliance, ambition, determination, and the like. It includes a knowledge of the moral and immoral qualities, such as honesty and dishonesty, kindness and cruelty, justice and injustice, truth and falsity, egoism and altruism, etc. It includes a knowledge of ourselves, where we came from, what we are composed of, and why we do the things we do, and a knowledge of the origin and composition of our fellow beings, and of their similarity to ourselves. It includes a knowledge of the nature of habit, of how habits are formed and broken, and the art of self-culture and self-control. It includes finally a knowledge of the evolution of morals in past times, and a knowledge of the reform movements which exist to-day for the betterment of the world.

Ethics is the most vital and important of all sciences. It has both its theoretical and applied aspects. Its mission is nothing less than the

establishment of harmony among the inhabitants of the earth and the transformation of world-wide contention into peace and happiness.

II. THE LAW OF THE LARGER SELF

Many attempts have been made in times gone by to lure men away from their natures by holding up to them ideals of conduct based on mutual concession and disarmament. A world-full of beings acting each as if the world were made for him is like billions of beings trying to occupy the same place at the same time. There are bound to be confusion, class struggles, and conspiracies and counter-conspiracies. The outsider (or the insider with the objectivity of the outsider) is the only one competent to deal with such a situation. It would not take a man from Mars long to tell us what we ought to do here in this crowded and predatory world. And the thing for us to do is to get up there among the stars by means of that aviating faculty of ours and see our melancholy selves as others see us.

Many attempts have been made by moralists to formulate a single rule, so simple, so impartial, so all-inclusive, and so true that it alone, if obeyed, would remedy the ills of this world. The one best known in our part of the world is the one called the Golden Rule, "Do unto others as you would have others do unto you," promulgated

some 1900 years ago. Almost identical with this rule is the generalization which Confucius framed for the orange race some 500 years earlier—"What you do not like when done to yourself do not do to others." Buddha, who taught compassion and self-effacement to the millions of India and the East, not only urged the same ideal, but out-Darwined most Darwinians by extending its application to the entire population of the earth. The most of the moralists who have arisen among men in times gone by have been too provincial to extend the white wings of their message beyond the bounds of their own species. Emanuel Kant was the greatest metaphysician the earth has ever produced. His cure-all for the woes of the world was something like this: Act as you would wish all men to act, that is, in such a way that if your conduct were universal all would be well.

All of these teachings are opposed diametrically to the doctrine that "might makes right," which may be called the Law of the Primitive.

The ideal rule of conduct must be impartial. It must be universal. It must be plain and convincing. It must be easy to apply. Its chief function should be to counteract the preponderance of egoism.

ACT TOWARD OTHERS AS YOU WOULD ACT TOWARD A PART OF YOUR OWN SELF is, it seems to me, the plainest and truest and the most comprehensive and useful rule of conduct ever formulated on this earth. It is the expression of balanced egoism and altruism. It is the soul of sympathy

and oneness. It may be called the *Law of the Larger Self*. It is the extension of the regard which we have for ourselves to those below, above, and around us. It is simply the law of the individual organism widened to apply to the Sentient Organism. It is the message which is destined in time to come to redeem this world from the primal curse of selfishness. It is the dream which has been dreamed by the great teachers of the past independently of each other, merely by observing the actions of men and thinking what rule if followed would cure the wrongs and sufferings of this world.

We are all *One*. There are no "others." There is only One. That One is *The Sentient World*. The Self includes all that feels. "Others," so-called, have come from the same great womb as we have, have grown up in the same world conditions, and been freighted with like susceptibilities. Each of us is a cell in the gigantic Organism of Life. The parts come and go, but the Great Being is immortal.

The Law of the Larger Self means Universal Mutualism. It means a widening and promotion of the ambitions. It means a transfer of emphasis from a Part to the Whole. Instead of striving for the happiness and well-being of a Fraction, we strive for the happiness and well-being of All.

The world longs for gods. Here is a god that we can love and bow down to and worship—a god, moreover, who will not pass away nor turn to incense when put into the crucible of Science.

The world longs for peace and rest and happiness. But never, *never*, will it know peace and rest and happiness until we treat "others," so-called, with the same sympathy and tenderness and long-suffering and love that we have for our own hands, our own eyes, our very heart and soul.

The world will never be redeemed on a basis of egoism. Egoistic pleasures are too expensive. It has been said that "Joy is only our side of others' sorrow." How true this is in this mal-wrought world of ours! And how unutterably sad! To think when we feel happiness that it has been paid for by the pain and tears and death of our fellow beings! To think that so many of even our ordinary, every-day pleasures are experienced at an absolute loss! They *pay us*, but they *do not pay the universe*.

The Law of the Larger Self is the social philosophy which has been preached in one form or another by all those who have in past times been mistaken for gods. Yet, astounding as it is, this sublimest of all ethical generalizations is merely a sententious verbalization of the social philosophy of the beehive!

Let us be patient with one another and bear one another's burdens, and love and care for one another as we love and care for our own hands and eyes. This is the Ideal. This is the Way of Heaven. Let us put ourselves in the place of the weak, the heavy-hearted, and the sinful. We, if we had started at the same place and had travelled the same road through life, would be

as they are, and would do the things they do. We are different from them merely because Fate has been kinder to us in the allotment of heredities and in the assignment of environments to pursue us through life. The sinful deserve compassion just as truly as the blind and diseased. O Pity! There is no one but can hate. But only the Divine feel sorrow for the poor, maimed millions who come into the world with the curse of the wayward. We may pity, even while we slay, just as we may execute a tooth or a limb when it threatens the life and well-being of the whole body. We pity the *part*, but we pity the *whole more*. Social surgery is useful and justifiable, but it should never be regarded as an exercise.

The Law of the Larger Self has a biological basis and justification of the most substantial character.

The original inhabitants of the earth were the Protozoa—beings of microscopic size, and with single-celled bodies, and solitary in their ways of life. The larger and higher animals, including man, arose from the Protozoa through certain species which acquired the habit of living in colonies. These colonies (called “colonial Protozoa”) were at first composed of loosely-associated cells, each cell retaining much of its independence. But with increasing co-operation and division of labor the cells became more and more dependent on each other, and the individuality was gradually transferred from the cell to the colony. The many-celled animals, or

Metazoa, are merely colonies of one-celled animals in which the cells are so specialized and sympathetic, so dependent and unified, that the individuality of the cell has disappeared entirely in the individuality of the colony.

The bodies of the Metazoa are the oldest and most highly-perfected forms of association on the planet. They are models of mutualism. They embody the wisdom and experience of a hundred million years. The aggregation of Metazoa into colonies or societies is taking place, and is destined to continue to take place in times to come, in accordance with the same laws of economy as the aggregation of Protozoa into many-celled Metazoa. And in applying to Secondary Aggregates the law of association which has been worked out and adopted by Primary Aggregates, we are acting in accordance with the highest possible authority to be found on earth.

The Law of the Larger Self is nothing but the law of Primary Mutualism—the law of the component cells of our own bodies—applied to those products of Secondary Mutualism which we call societies and states.

The Law of the Larger Self is the ethical code compacted to the conveniences of a tablet. It should be proclaimed wherever there are ears and hearts and minds to be moved. It should be written in letters of fire five miles high across the skies of all climes for mortals to gaze upon when they lift their streaming and hungry eyes to heaven. It is the Gospel of a New Paradise.

12. CAUSES OF IMMORALITY

The two chief causes of human wrong-doing are *Selfishness* and *Ignorance*—the disposition, planted deep in our natures, to prefer ourselves to others, and the failure to put ourselves in the place of others. Selfishness is a weakness co-extensive with the animal kingdom. Man is selfish because he is an animal. The failure to put ourselves in the place of others is due either to feebleness of the picturing power of the mind or to a lack of knowledge of the similarity of others to ourselves. To be immoral is to be primitive, indelicate, and natural. To be moral is to be artistic, supernatural, and cultured.

Every being on this globe is partial to himself. He loves and thinks of himself more than he loves and thinks of others. And in so far as it is possible to do so, and in so far as the laws of society allow it, there is a general tendency for each to sacrifice others to his own interests. The self is exaggerated. We call this exaggeration, this self-apotheosis, *selfishness* or *egoism*. We are not yet *brothers*—even we higher and better peoples who get so much satisfaction out of the contrast between ourselves and our ancestors. We are, on the whole, a great improvement over the savage, but we are a long, long way from that state of which we sometimes dream when love shall perfume all our acts.

The preponderance of selfishness in the natures of the inhabitants of the earth has resulted from the manner in which life has been developed on our planet—from the incessant survival through millions of years of the selfish in the struggle for life. It is possible to think of methods of evolution which would produce beings with a perfect balance of egoism and altruism in their natures—beings who would naturally take as much interest in others as in themselves, and who would get as much pleasure out of doing for others as for themselves. Such methods of evolution would have been ideal, and would have saved us the long, toilsome pilgrimage which we are in the act of making toward the ideal. But for some reason no such methods were employed in the case of the earth.

Selfishness has been developed through war—through the competition of individual with individual in the struggle to live. There has been throughout the ages of the past an over production of living beings on the earth. More beings have been turned out than there have been food and light and air and room for. An age-long struggle has resulted. The fittest have survived. Selfishness has arisen in men and other animals in the same way exactly as have long-leggedness in antelopes and ferocity in lions and rattlesnakes. It has enabled beings to succeed in the struggle to live. Those beings have survived who have had the disposition to look after themselves, while the indifferent have gone down.

Altruism has come about through co-operation.

In union there is strength. And the struggle of numbers working together is as useful in the war for existence as strength in an individual. Men and other animals have stood by each other and co-operated with each other because there have been circumstances in the shiftings of evolution when it was the only way they could stand. The preponderance of egoism over altruism in the natures of the inhabitants of the earth has resulted from a corresponding preponderance of war over co-operation in the activities of the inhabitants of the earth.

The concern of moralists in all times has been to find ways to induce men to transfer some of the redundant devotion which they naturally have for themselves to those around them. And the chief injunctions which have been worked out and taught to men by the great teachers of the past have been designed all of them for this purpose. "Do unto others as you would have others do unto you," "Love your neighbor as yourself," and "It is more blessed to give than to receive" have in view the increase of altruism and the decrease of egoism in the world. "Do unto others as you would have others do unto you" means to act toward others as you would act toward yourself in case you were both the subject acting and the object acted upon. "Love your neighbor as yourself" means to put your neighbor on a par with yourself—to promote your fellow traveller in this cold pilgrimage of earth to the same high place in your affections and longings as you yourself occupy. We are taught that it is more

blessed to give than to receive, because of the greater enthusiasm which we naturally have for the latter of these two activities than the former.

No great headway has so far been made in the effort to equalize the antithetical propensities in human nature. Altruism is still scarce. And it is exceedingly weak and impure where it exists at all. The attitude of the mother toward herself and her child is about the nearest approximation of balanced egoism and altruism to be found on the earth—outside of the beehive.

The one great task in mundane redemption is the equilibration of the antithetical tendencies of egoism and altruism. This task is enormous. But it will be accomplished sometime. The race is in its infancy, and the ages of human endeavor are endless. The time will come when men will love their neighbor as they do themselves. It is as certain as the sunrise. The defects in human nature are so old and deep-seated, however, that it is too much to hope that they will ever be completely remedied, until more effective methods have been invented than any that have been used so far.

Another important cause of error in human conduct is the rudimentary character of the human imagination. The imagination is the picturing power of the mind—the power which enables us to put ourselves in the place of others. From the standpoint of morals and hence of human welfare the imagination is one of the most important of all the powers of the human mind. It is the basis of sympathy, and the essence and

foundation of the truest forms of altruism and brotherhood. The imagination is not well-developed even among elect peoples. Among savages it is either weak or wanting.

Sympathy is the feeling which a being has when he gets so completely over into the place of others that he reproduces in his own consciousness by means of his imagination the feelings of others. It is the ability to weep with those who weep, and rejoice with those who are glad. When we see a child or a horse being beaten in an unmerciful way, we are in pain. It is the pain of sympathy, reinforced perhaps by the feeling of resentment. We experience ourselves the same pain which we imagine the child or the horse is actually suffering. Laughter is infectious. So is sorrow. It is the work of the imagination. When we go to a funeral, where there is weeping, we weep inevitably. It is not mimicry. It is that wonderfull necromancy of the mind which enables us to absent ourselves from our own bodies—to go over temporarily into the bodies of those around us, and look upon that sleeping face and those silent lips out of the eyes of mourners.

The being with a skilled imagination lives all lives. He is so closely bound to those around him that a large part of his own life is made up of the experiences of those around him, which he reproduces in himself by means of his imagination. We are not highly developed beings unless we feel pain in the presence of any suffering or unjustly treated being, whether human or non-human.

What is more healing to one in distress than the heart-felt sympathy of friends? What would one do when he gets into a hole and doesn't know which way to turn, if there weren't a few human beings (or dogs) willing to get right down into the hole there with him and stay there till he gets out? In a world of trouble like this there is no activity more appropriate and divine than putting one's arms about people.

Man's inhumanity to man and his inhumanity to not-men are both due largely to feebleness, or lack of education, of the imaginative faculty. Take almost any crime you can think of, and you will find that the individual who does the crime does so because he neglects to put himself in the place of his victim. If he had put himself in the place of the one injured and actually realized the effect of his acts, *had actually felt what his victim felt*, he never would have done what he did.

The savage is more cruel than the civilized man because he has poorer facilities for feeling the pain which he produces. He can strike a knife into a man or a horse, and, instead of getting over into the place of the man or the horse and feeling the pain which the injured feels, he feels the gratification of prowess or the pleasure of some advantage which he anticipates his act will bring to him. The civilized man cannot do this—the *really* civilized man cannot—although there are thousands mixed up with every so-called civilized society of men who for all practical purposes are as successful in ignoring the effects of their acts on others as cavemen. The ideal

man has in his being a power which picks him up and lands him in the place of every one upon whom he acts and compels him to repeat in his own consciousness the psychic effects which he produces in others.

The imagination is of such tremendous ethical importance, and is at the same time so inherently weak, that it seems astounding that it should have hitherto been so completely overlooked by educators. Years are spent training the mnemonic and rational faculties of the mind, but scarcely any attention whatever is given to the cultivation of that most useful of all powers for the promotion of altruism—the sympathetic imagination. The educated imagination is the best guarantee of human justice. It is the only true basis of brotherhood and unity. Among beings of sympathy, each suffers and enjoys the effects on others of all his acts, as much so as if others were a part of himself.

Another cause of our failure to put ourselves in the place of others, and to act toward them as we would act toward ourselves, is *Ignorance of Similarity*. We do not know, or, at least, do not realize, that other beings are similar to ourselves, and that our acts produce in them effects similar to what such acts produce when done to ourselves. This is true of men in their treatment of other men, and it is many times true of them in their treatment of not-men.

Here is an expression of this idea by Professor Royce of Harvard:

“Who is thy neighbor? Thou hast regarded

his thought and his feeling as somehow different from thine. Thou hast said, ‘A pain in him is not like a pain in me, but something far easier to bear.’ He seems to thee less living than thou. His life is dim and cold, a pale fire beside thy own burning desires. So dimly and by instinct hast thou lived with thy neighbor, and hast known him not, being blind. Thou hast made of him a *thing*, no self at all.

“Have done with this illusion, and learn the truth. Pain is pain and joy is joy, everywhere, even as in thee. In all the songs of the forest birds; in all the cries of the wounded and dying, struggling in the captor’s power; in the boundless sea, where the myriads of water-creatures strive and die: amid all the countless hordes of savage men; in all sickness and sorrow; in all exultation and hope; everywhere, from the lowest to the noblest, the same conscious, burning, wilful life is found, endlessly manifold as the forms of the living creatures, but unquenchable as the fires of the sun and as real as these impulses that even now throb in thine own little selfish heart.”

We treat those with whom we associate day after day more justly than those whom we do not know. “Strangers” and “foreigners” are more subject to abuse and misunderstanding than those belonging to our own family, class, or society. It is because we are less conscious of their reality and of their similarity to ourselves. The railroad, telegraph, telephone, newspaper, and other means of general and international acquaintance are doing more to banish war and animosity

from the earth than all our peace societies could possibly do.

The ignorance of similarity is still more manifest in man's relations to the non-human inhabitants of the earth. These beings are worse than foreigners. They are mere "animals." And down to comparatively recent times they were supposed by everybody to have come upon the earth in an entirely different way, and for an entirely different purpose, from man. They were supposed to be mere machines, without any endowments of feeling or intelligence, which were placed here on earth by the universal architect to serve as conveniences for his masterpiece and favourite. Many of these non-human beings are so remote from human beings in language, appearance, interests, and ways of life, as to be nothing but "wild animals." These "wild things" have, of course, no rights whatever in the eyes of men. They are treated with about the same consideration as the clods of the field. They are "beasts." Since they use a different language from what man does they are said to be "dumb." Mark Twain, the great humorist and humanitarian who has recently passed from our world, somewhere makes an observation on this subject of "dumbness" in other animals. He says: "So far as I know there is no such thing as a dumb beast. Dumb beast suggests an animal that has no thought-machinery, no speech, no way of communicating what is in its mind. It is just like man's vanity and impertinence to call an animal dumb because it is dumb to his own dull perceptions."

A person asked me the other day whether a frog has a heart or not. And another person wanted to know whether a fish could feel or had anything that could be called a brain. These are only two instances out of hundreds of a similar character which have come to me, and which convince me beyond a doubt that people generally have almost no biological background for their judgments, and only the most shadowy realization, if any at all, of the unity and similarity that exists among the tenants of this globe. A frog not only has a heart, but it has the same general architecture in every way as that which exists in our own bodies. And a fish has in its brain the same fundamental parts—cerebrum, cerebellum, optic lobes, etc.—as are found in the brain of a philosopher. Fishes were the pioneer vertebrates, and they laid the foundations of all the departments of the vertebrate plan of organism, both of body and mind.

In time to come, when the human mind has become broader, and knowledge more general, and the imagination is trained systematically in all the schools of mankind, men will look back on us to-day as a lot of brilliant knaves. We are able to do so much, and to feel and realize so little. From an extra-terrestrial point of view human conduct is literally demoniacal.

Here is a man with millions of dollars in his possession. He has leisure, automobiles, summer and winter homes, magnificent furnishings, and a family that want for nothing. He sails the seas in his private yachts and spreads ten-thousand-

dollar banquets to his friends. In order that he may do these things thousands of other men are compelled to make a speciality of self-denial and suffering. They are the so-called "workmen." They live in hovels, and eat coarse food, and toil and sweat day after day from one year's end to another. They keep the breath of life in themselves and their families on a dollar or two a day. They are without art, education, travel, and the refinements and pleasures of life generally. The great mass of mankind are restricted to the privileges and pleasures of domestic animals, in order that a few of their fellows may roll in gold. *We are a race of cannibals. We eat each other.*

The attitude assumed by human beings toward non-human beings is essentially that of savages. It is utterly atrocious. "Civilised" men are the only beings on the earth, or, let us hope, in the universe, who find relaxation in killing and terrifying. Our rulers stand in stockades when they hunt, and murder the creatures rounded up by beaters. Their guns are loaded and handed to them by servants. All they have to do is to pull the trigger and keep their humanity down to the level of the reptile.

The despatches have just brought us an account of a recent massacre committed by a couple of the Royal Sovereigns of Europe. A battalion of troops and rangers had been occupied for days rounding up the inhabitants of the region for the occasion. At the appointed time 1,500 deer and other animals were driven from the enclosure,

where they had been coralled, past the boxes where the royal persons were hidden, and were shot down in cold blood. And to think that such primitive and inhuman monsters as this preside over the destinies of millions of people in this supposedly somewhat enlightened time of ours.

If we must shoot, in the name of humanity let us have imagination enough not to use living targets.

Immorality is wrong-doing, waywardness, erroneous conduct, acts which on the whole contribute to the ill-fare of the universe. The chief cause of immorality is *selfishness*, the presence within us of impulses which urge us to over-devotion to ourselves. These acts of self-devotion ignore or inhibit the satisfactions of others. In feathering our own nest we desolate the nests of others. This desolation of others often leads to reprisal. A good deal of the so-called crime of the world is nothing but an attempt by the deprived to snatch from the successful selfish a remnant of what is rightfully due to them, and which has been appropriated by others under the forms of government.

A man succeeds in grabbing a county, a vantage-place, or an industry. The other inhabitants of that county or dependents upon that vantage-place or industry are left unprovided for and more or less at the mercy of the one who has succeeded in gobbling up things. The unsuccessful ones desire to live the same as the successful one, and they raid the granaries of the successful one, and are sent to jail for it. Men

are tried and convicted and sent to prison for taking things which under prevailing forms of law belong to others, but which under more equitable conditions would be regarded as their own property.

Another cause of immorality is *ignorance*. We don't know that other beings are so similar to ourselves as they are, and that the effects of our acts on them are so bad as they really are. We lack the facilities for putting ourselves in the place of others. Many a selfish impulse would be curbed if we were provided with the powers of mind that would cause us to experience ourselves the effects of our acts on others. Sympathy is the natural and most reliable basis of altruism—sympathy induced by the imagination.

Selfishness is primordial. It is the common misfortune of all animals, from animalcule to philosopher. It has resulted from the manner in which living beings have been produced in this world. What we call the growth of morality among men is a tendency toward a general treaty, according to which each individual relinquishes a portion of his ambition to be the whole thing in the world—a treaty providing for the life and happiness of all on the basis of mutual concession.

The ideal nature is one of balanced egoism and altruism—a nature attuned to the Golden Rule—a nature having the same concern for others as it has for self—a nature of love and solicitude for the universe. This world will some time be inhabited by beings with such natures, and these

beings will provide themselves with customs and institutions in harmony with their natures. It will be the Golden Age of our dreams. We shall never see that time. We happened to have appeared too early in the spawning of the generations. But we can work for it, and in our faces may shine the light of that far-off radiance, and in our hearts, through sympathy, we may actually feel something of the joy of *The Brotherhood To Be.*

13. VESTIGIAL ORGANS

As a rule, animals are adapted to their surroundings. They have the form and architecture which they need to enable them to exist. They fit their surroundings as if they had been whittled out by some expert to suit the various places in which they live. It used to be supposed that this wonderful adaptation of living beings to their surroundings was a manifestation of the skill and benevolence of the Creator. It is now known to be the result of a world-wide struggle to live and a consequent survival of the fittest.

More beings are born than can live on the earth. There is not enough food and air and room to go round. It is estimated that a single pair of house sparrows would in twenty years, if none should die, produce enough sparrows to cover the state of Indiana. Certain low forms of animal life reproduce so rapidly that, if they should all

survive, their progeny would in a few days fill the seas.

A result of this overproduction of animal life is a world-wide struggle for existence. The earth is a battlefield. How it may be on other spheres, we know not. But on the particular globe on which we have been allotted to come to consciousness, life is one mighty tragedy. Species are pushing and crowding and murdering each other in the effort to live. And this pushing and crowding and exterminating has gone on ever since the advent of life on the earth millions of years ago. There are about a million species of animals known to science at the present time. And there are probably a million more that are not yet catalogued. And it is estimated that from twenty to one hundred times as many species of animals have lived and perished from the earth as to-day survive—twenty to one hundred times as many *species*, remember, not individuals. This fact gives a little hint of the nature and extent of the massacre which has gone on here on the earth, and whose story lies locked for ever in the fossiliferous rocks.

In the struggle for life species are continually displacing each other—continually driving each other out of one set of surroundings into another set. And it is one of the by-products of this displacement that is the subject of this chapter.

When a species is driven out of one set of surroundings to which it is fitted, into another set different from the first, it is very likely to have some organs that are left over and not needed in

the new environment. On the other hand, it will probably need some organs which it does not possess. Now, it is possible for it to make over an organ which it does not need into one that it does need, somewhat as our mothers used to transform a coat which we did not need into a waistcoat or a pair of trousers which we did need. The wings of birds were formed in this way out of the fore legs of reptiles.

But the transformation of superfluous organs into useful organs is the exception. As a rule, organs that are not needed go to waste.

It is a law that when organs are not used they tend to disappear. Organs that do nothing are not nourished, and hence tend to fade away. Then, too, organs that are not used are not emphasized by Natural Selection. And if their uselessness continues long enough, they will not only shrivel and decay, but will finally pass out of existence entirely. There are almost numberless examples of extinction of this kind known to biologists. The disappearance of legs in snakes is an instance. In the struggle for life snakes found it of advantage to adopt a wriggling or creeping style of locomotion. The legs went out of use as a result. And this change in the life of these reptiles took place so long ago that in all but a few cases every vestige of limbs has disappeared.

But there are many instances in the animal kingdom where discarded organs still survive in a dwindling and emaciated condition. These organs, in the ancestors of the animals now

possessing them, were fully developed and useful, but, because of a change in habits or conditions of living, they are now of no further use, and are gradually dying out. Such organs are called Vestigial Organs.

Vestigial organs are simply organs without a job. They are organs which have nothing to do, and which have suffered the inevitable consequences of long idleness. The amount of degeneration which any organ has undergone depends on the length of time which has elapsed since it became useless. Vestigial organs are departments which have gone out of use, but which have not yet gone out of existence.

One of the best known examples of vestigial organs is found in cave fishes. Fishes ordinarily live in the light, and have eyes. But in the struggle for life certain species have been driven down into the ground. They have come up the streams flowing out of the caves—up into this uninhabited region of darkness. They found no enemies up here, and the conditions of living less severe than on the outside. And they have lived here in this world of night so long that they have become blind. They have eyes, but they are mere vestiges which are of no use. Crickets and lizards that have lived long in the total darkness of subterranean caverns have suffered the same ocular experience.

The mole is another example of this kind. It is a mouse-like animal that lives in the ground, and makes its runways along just under the surface of lawns and gardens. The mole once

lived on the surface of the ground. But in the struggle for life it has been driven down into the earth, and it has resided down there so long that it has become completely adapted to its subterranean life. Its feet have become shovels, and are provided with powerful muscles for opening ways through the earth. Its nose is sharp and sensitive. Its fur is exceedingly smooth. And it is *blind*. It is commonly supposed to be without eyes. But in under the fur there are two little bead-like vestiges of eyes, the remnants of organs which it had and used when it was an inhabitant of the light of day.

In the lower right hand corner of the human abdomen is a little tube about the size of a goose-quill and two or three inches long. It is closed at one end and opens at the other into the large intestine. It is called the "appendix" for short, but its full name is the *vermiform appendix*. In times of low vitality or impure blood this organ often becomes inflamed, and we have the disease called *appendicitis*. It used to be supposed that appendicitis was caused by a grape-seed or other hard object lodging in the tube, and by irritation setting up the inflammation. This is sometimes the case, but not often. A young man told me the other day that he had had appendicitis and that when they came to operate the surgeons found a tooth-brush bristle in the appendix. He had been brushing his teeth and had swallowed a detached bristle and it had become stranded here, and by its irritations had set up the disease. But it is very seldom that anything is found in

the appendix except pus produced by the inflammation. The common remedy for this disease is amputation of the diseased part, although recovery is possible without an operation by a change in the habits of life. The chief causes of human disease are over-eating, under-exercise, and bad air. Any of these may lower the vitality sufficient to cause disorders of any kind. And a necessary condition for the cure of most human ailments is to acquire correct habits of eating, exercising, breathing, and bathing.

The appendix is a useless organ in man. We would be a great deal better off if we could be born without it. It is more than useless, for it is the seat of a dangerous disease. But in the rat, bird, monkey, and other animals it is large and a regular part of the digestive system. Food enters it, and its walls absorb nourishment and contribute digestive chemicals, the same as the stomach and intestine. In the rat it is a pouch as large as the stomach and serves as a sort of second stomach. In the bird it is double. And in some of the lower ruminants it is as long as the body. But in man, for some reason, it has been abandoned as a digestive organ, and is headed for extinction. There is every reason for believing that this organ will in the course of evolution pass away entirely, as has been the case with the legs of snakes and the seeds of pine-apples and potatoes.

The ear is found in all animals except some of the lowest. It is an organ for taking cognizance of air-waves. In the more highly perfected ears

there is an external part, usually in the form of a funnel, for more effectually catching the sound-waves. There are muscles connected with these funnels for turning them this way and that in order better to receive the effect of the waves. In common with other animals, man has these ear-muscles. But they are so small and weak and out of practice that they cannot be used. Occasionally there is a boy who is able to move his ears slightly, but not enough to serve any useful purpose. Ear-muscles are not necessary to man. He is the King of Beasts. He has conquered or exterminated most of his animal enemies. Man's greatest enemy now is himself. And it is of no advantage to him in his battles with himself to be able to turn his ears artfully this way and that like the donkey.

Auditory funnels are much more necessary to wild animals than to those who have been domesticated. And in all wild animals, except the elephant, the ears stand up. But when animals are brought in by man, and put in pens or pastures, and protected from their natural enemies, they have less use for these detective organs. And as a consequence these organs go into decline. The lop-ear, which is found in certain varieties of nearly every kind of domesticated animals, even in cats and horses, is an evidence of tranquility and civilization. The straight ears, on the contrary, are evidence of proximity to the wild.

Man was once a wild animal, and contended unarmed with other animals for food and life.

And so long as he was on an equal footing in the battle for life he had need of his ears; for his most triumphant way of dealing with many of his enemies, before he invented the club and the spear, was by taking to his heels; and his ears were very useful aids in enabling him to begin his activities in time. But, nowadays, he has become such a chemical wonder that he blows out the lives of his enemies with explosives. And his ears have gone to ruin as a consequence.

The whale, from the standpoint of evolution, is one of the most interesting animals in the world. It is not a fish, as many people believe. It is a mammal. It belongs to the hairy crowd of animals. It breathes air by means of lungs, just as we do. It does not live *in* the water, like the fish, but on the surface of the water. When it dives, it holds its breath. The young of whales are born alive, and nourished during their infancy by milk secreted by the mother, as in all other mammals. The whale is a land animal which was once covered with hair and walked on four legs, but which in the struggle for life has been driven off into the seas. And it has lived out on the waters so long that it has acquired a fish-like shape and lost all connection with the land. It is like the seal, which, Jordan thinks, was a bear which has been crowded off the continent somewhat more recently than the whale, and which never comes back to the land except once a year to raise its young. Some of the seals do not come to land even to breed. In order to avoid the dangers of the

shore, they give birth to their young on cakes of floating ice off in the sea. The seal still has its four legs, but its hind legs have grown permanently out behind, one on each side of the stump-like tail, and serve as a swimming or driving organ. But it has almost lost its powers of land locomotion. It can merely flounder or wriggle about on land. The whale has lost its hind legs, and its front legs have been modified into flippers for swimming, but having the same parts and bones as our own arms—humerus, ulna and radius, carpal bones, and five series of branching bones at the end. The tail has become the great driving organ in the whale. The hind legs have hence been rendered useless, and have gone out of existence. No external remnants of hind limbs exist in whales. But internally, in the place where hind limbs would naturally be if it had any, are found two little bones. They are the ruins of hind limbs.

Hair is a hindrance to an animal occupied in driving itself through the water, at least it seems to have been so in the case of the whale. And the whale has lost its hairy covering. It has only a few bristles about the mouth remaining. A species of whale has recently been found in the South Pacific which has a considerable growth of hair under its chin. It is bald, but has whiskers.

Some whales have teeth and chew their food. Others are toothless and swallow their food whole. These latter are called whale-bone whales, because it is from them that the so-called "whale-bone" of commerce is obtained—or was

obtained before we killed off the whales and had to take to making "whale-bone" out of feathers. The "whale-bone" is in the mouth of the whale, arranged in the form of a sieve or colander. It is a device of the whale for snaring its food. The whale has a capacious mouth, and it takes in a large amount of water, together with the small fishes and other animals inhabiting it. It allows the water to strain through the colander, and the fishes are caught and swallowed. These whales are said to be "toothless," but in under the gums are rudimentary teeth, which they never use—indicating that the "toothless" whales once had teeth and chewed their food like the toothed whales to-day. But they went into the colander business and got to swallowing their food without chewing. The teeth went out of use, and have almost, but not quite, gone out of existence.

Another animal of much interest from the standpoint of evolution is the bird. The bird is a feathered animal. Instead of hair or scales, its body is covered with feathers — those most wonderful of all epidermal creations. For a long time it was a problem where birds had come from. They seemed to stand off alone, without any intermediate forms connecting them with any other group of animals. The absence of "connecting links" between birds and other animals was for years almost as gratifying to the anti-evolutionist as the supposed scarcity of links between men and monkeys. I don't know, however, that there is any great hiatus between men and monkeys. I have seen monkeys that in

intelligence and civilization as well as in looks and disposition were a decided improvement on some men I have seen. But, of course, monkeys cannot walk on one end and export ideas in Niagaras of our vernacular, like the men, and hence have to take a little lower place in the biological scale than their classifiers.

In 1861 there was found in the slate quarries of Bavaria the fossil remains of an animal which solved the problem of the relationship of the birds. Another fossil of the same animal was found a few years later. One of these fossils is now in the Berlin Museum and the other is in the British Museum. The animal was a bird because it had feathers. It has been called the *Archeopteryx*, which means "ancient bird." It was about the size of a crow. It was about as near a connecting link between lizards and birds as would be formed by taking a lizard and a bird and mixing them. Its bird characteristics were its feathers, its general bird shape, and its wings. But it had teeth, like the lizard, and a long vertebrated tail, with a pair of feathers extending from each vertebra. It had four fingers in its wing, three of them entirely free, and each ending in a claw, as in lizards. (There is one modern bird that still has claws on its wings when young—the *hoazin*, an old-fashioned bird of South America.) Its feet and legs and fingers were covered with scales. The principal feathers of the wing, instead of extending from the fingers, as in modern birds, were attached to the forearm (the ulna-radius region of the wing), and corresponded

to the secondaries of living birds. It was probably a weak flyer, and an awkward-looking creature. It was the first rough-draft of a bird. In the modern bird's wing there are two fingers and a vestige of a third—the "thumb." The main or primary feathers of the bird's wing are attached to the first and second fingers. The "thumb" is vestigial. It supports a small bunch of four or five useless feathers, called the "bastard wing." The rudimentary hind toe in certain birds is also vestigial, never touching the ground.

The "glass-snake" looks very much like a cousin of the common garter snake. It is called "glass-snake" because of a certain brittle habit which it has. Strike it with a stick, and it will break into three or four pieces. It is sometimes called the "joint snake," because of this weakness for going to pieces in times of excitement. This being was common in that vanished world where I spent my barefoot days. And we children believed (for we were told so, and we believed everything we were told) that, when one of these creatures went to pieces and the enemy with the stick went on, the pieces came back and went together again, and the restored individual went on its way rejoicing. We thought it was a trick to save its life. And I can recall now in my memory the picture which I formed in my mind as a boy of these pieces wriggling cautiously back from their hiding places and backing up to each other and in some mysterious way becoming attached to each other again, and the reconstructed individual taking up once more the thread of its unfinished life.

But the "glass-snake" is not a snake at all. It is a lizard, and it is so classified in all the books. Scientists call it *Ophisaurus*, which means *snake-lizard*. Snakes are limbless lizards. When we find a lizard without legs, we call it a snake. And when we find a snake with legs, we call it a lizard. The "glass-snake" is a lizard because it has four legs. But its legs are not visible. They are internal. The "glass-snake" is a lizard on the way to becoming a snake. We catch it in the act. It is a connecting link between these two orders of reptiles. The legs have gone out of use but not long enough ago for them to have passed out of existence. They are vestigial. In the bodies of some snakes, as the pythons and constrictors, there are little clawed remnants of hind limbs.

Snakes have only one lung. They have come from ancestors with two lungs, but their body is so narrow that there is not room for two lungs side by side, so one lung has been abandoned and the other one has become larger by extending back along the body. The abandoned lung still exists, but it is a mere unused remnant. The right ovary of birds has become atrophied in a similar way, all the eggs of birds being produced by the left ovary.

The original mammals had five toes on each limb. And a good many mammals have retained this old pentadactyl style of foot. Man has. So has the monkey. So has the elephant. But the great majority have lost one or more toes from each foot. The hippopotamus has lost one

toe from each foot, and has four left. The rhinoceros has lost two toes from each limb, and has three left. The tapir has four toes on each front foot and three behind. The cow, sheep, pig, and a large number of other animals have two toes on each foot, having lost three. The horse has gone to the extreme in this process of elimination, and has only one toe on each foot. The horse walks on its big finger—on the *nail* of the big finger. In the foot of many mammals are found remnants of these discarded toes, in all stages of dilapidation. In the two-toed animals there are two small toes just at the back of the ankle. These toes never touch the ground, and are not used in any way. They are the vestiges of the last two toes abandoned. In the horse the last two toes abandoned are represented by two splints just at the back of the ankle. We can trace the horse back through the rocks to a time in the Eocene age when it was a little animal the size of a fox with four toes on each front foot and three behind.

Man is a mammal, and, like all other mammals, his body is covered with hair. Hair is found over the entire human body, except on the palms of the hands and feet and the distal segments of the digits. On the head and on the faces of males it is an ornament and protection—or *was* in times gone by. But the hairy covering of the body generally is of no use. It is vestigial. It survives, though in a greatly dwarfed condition, from the time when it was the natural and only clothing of the body.

Associated with each hair are muscles, by the contraction of which the hair is raised and lowered. But these muscles are never used—they are too weak to be of any use—except on occasions of great fear and terror sometimes, when the muscles of the scalp may cause the hair “to stand on end.” These muscles are vestigial. This power of raising the hair of the head is still possessed by the ape. It is an aid in rendering it more terrifying in appearance, like the bristle-raising in the dog and pig.

The third molars in the human mouth are, or are becoming, vestigial. They are the so-called “wisdom teeth.” They appear years behind the other teeth, and in about one in a hundred persons never appear at all. Observations show that they are more frequently absent in the higher races than in the lower. The original mammals had 44 teeth, eleven in each half-jaw. Some of them retain the original number, as the horse and pig. Man’s dental areas have been much reduced by the gradual contraction of the face and jaws. Man has lost three teeth from each half-jaw, and is in the act of losing a fourth.

In all of the five sub-classes of vertebrates—fishes, frogs, reptiles, birds, and mammals—there are certain species which have a third eyelid, the so-called “nictitating membrane.” It is a thin half-transparent curtain used in sweeping the eye. It may be seen in birds. Most mammals, including man, are without this lid. And in these animals it exists as a vestige in the inner corner of the eye.

The tail has never been a popular part of the human anatomy, not even with those rhapsodists who have the courage to continue to talk about the "human form divine." Not many beings even know definitely that they have anything approximating such an organ. Since the rise of evolution the human tail has for some reason become even more unpopular than it was before. It seems to be, indeed, a sort of anatomical red-rag to many people—calling up to their belated minds horrible creatures with hair that live in trees and swing from limb to limb and hold on by means of their projecting back bones as with a fifth limb. For my own part, I am glad to say that I never had the hesitancy that many people have in facing the facts of human origin. It always seemed to me more honorable to have started humbly and come up than to have started high and come down. I would rather be an evolved monkey than a demoted god. People who brag so much about their ancestors generally do not have much else to brag about. The human tail does not amount to much in adults, containing only three or four very much ankylosed vertebrae. But there is a stage in embryonic development when it is a thing not to be despised—when it is longer than the legs and provided with a regular set of muscles for wagging it. These muscles sometimes persist after birth in a vestigial and much-weakened condition.

Other examples of vestigial organs are the rudimentary fibula in birds and other animals, and horns and wings in domesticated races.

Horns are the weapons of defence of wild cattle, and are absolutely indispensable in a world of wolves and bears. But domesticated cattle would be even better off without them than with them, as is shown by the fact that horns are often amputated by man. The skin muscles in the human forehead are the final survivals of an epidermal system of muscles found in the ape and other lower animals.

Vestigial structures are found everywhere, not alone in the bodies of animals and plants. They are by-products of all organic evolution.

Silent letters are vestigial parts of language, parts which have gone out of use but have not yet gone out of existence. In general all silent letters were once sounded. But through changes in the nationality of words or in the habits of those using them, many letters have fallen into phonetic desuetude. Take the word *knight*. The *k* and *gh* are silent. But our ancestors pronounced them, as the Germans do to-day their word *knecht*. So in the French word *temps*, meaning "time." The *p* and *s* are silent. But the Romans, from whom the French got this word, used all the letters, for they spelled and pronounced it *tempus*. We happen to be living at a time when a good many English words (too few, however) are being rationalized in their orthography. Why should we add *ugh* to the word *tho*, making the word just twice as long as it need be? Why should we not spell *thru* as we pronounce it? Or, if we insist on adding the unused *ogh*, why not throw in *ty* or *ski* for good

measure? Life is too short to spend half of it in learning to spell. We should have a symbol for every sound and a sound for every symbol. Then any one in a few hours could learn to spell any word in the language, whether he had ever heard the word before or not.

There are vestigial instincts in the minds of men and other animals, and vestigial parts in all human laws, customs and institutions. Our political, industrial, religious, educational, and juridical institutions are full of vestigial features.

This chapter is intended to serve as a preparation for the next chapter.

14. SURVIVALS OF THE WILD

Human nature is a terrestrial product. It has been formed here on the earth, and by agencies as natural as those that have produced rock salt. The theory that our body has been presented to us by the savage and the quadruped and still more remotely by the lizard and the fish, but that our psychology has been generated by us unaided by antecedent forms or has been surreptitiously injected by some agent from outside the earth is a theory no longer tenable. The human soul has ancestors just as the body has. Its ancestors look out through the eyes of quadrupeds and up from the waters where fishes swim. And just as it is impossible to under-

stand human anatomy and physiology without a knowledge of the anatomy of antecedent forms from which human structures have come, so it is also impossible to understand the things men feel and think and do without running human nature down and finding where and under what circumstances the various elements composing it have been acquired.

The domestication of other animals by man and the domestication of man by himself are among the most important and stupendous events in the field of human achievement. And there is no more interesting exercise in psychology than to take the various domesticated races of the earth, including the human, and compare them with their wild ancestors and see how much of their natures is due to the civilising process which has been going on here on the earth during the past few thousand years and how much survives from the more distant past.

All domesticated animals were once wild animals. And in most cases it is possible to put one's finger on the particular wild species from which each domestic variety has come. In a few cases the changes since domestication have been so great that it is impossible to identify the original wild species, if it still exists. In other cases the wild species has undoubtedly perished since its domestication began, and the species now exists only in the captive state.

Domesticated animals have been subjected to very great changes in environment, and they have for this reason an unusually large number

of instincts that are unrelated to their present surroundings. These instincts have been imported. They can be understood only by reference to the wild conditions in the midst of which they were evolved. They are survivals, which the centuries of human selection have not been able to iron out. In the wild life among the forests, mountains, and prairies, surrounded by enemies and pursued by wolfish wants, these instincts were useful to the individual and the species. But amid the artificial conditions created by man, they are not only useless but injurious and absurd.

Vestigial parts exist in the minds of men and other animals for the same reason exactly as vestigial parts exist in their bodies. Living beings are fitted to their surroundings, not only in form and structure, but also in their natures and ways of acting. Vestigial instincts are merely those instincts which have been thrown out of employment by changes in conditions imposed by the struggle for life. Men and other animals have many ways of acting that are useless. They are ways of acting without any reason for existence whatever. They survive wholly through momentum acquired in times gone by. Like the vermiform appendix and the eyes of cave fishes, they have gone out of use but have not yet gone out of existence.

Dogs hunt, even when filled with food. Take the gentlest collie for a walk. He will not follow behind or walk by your side. He will be nosing about here and there and scouring the

thickets and bank-sides to see what he can turn up. It is the instinct of the wolf. A lamb or a calf will not do this. The dog is a domesticated wolf. He hunts because its ancestors were hunters. He hunts in order to exercise an instinct which is unprovided for by his peaceful and sedentary life among men.

The gentlest collie will sometimes go on a spree of sheep-killing. He does not eat his victims or drink their blood. He does not kill because he is hungry. He kills for exercise. The impulse to kill, so strong in the wolf, has become weak in the collie from long disuse. The collie, indeed, has been so revolutionized in character since its association with man that he ordinarily defends the very beings on whom his ancestors fed. But occasionally the old instinct mounts to the high places in the psychology of this canine, and for the time being he is a wolf again.

Dogs bark as a general thing. But occasionally they express themselves in a strange, hair-raising howl. I used to hear this howl years ago on the prairies of Kansas when the coyotes called from the hills at night. Nell was our house-dog and friend. And ordinarily her voice was as soft almost as rippling waters. But when she heard the coyotes at night, she would sometimes stop barking and deliver herself in a loud, prolonged howl. It was so unearthly and so entirely different from her usual utterances that it always seemed surprising that she could ever be the author of it. It was the call of the

wild. Long ago she and her associates were accustomed to megaphone to each other in this way, and her machinery, although weathered by ages of domestication, had not forgotten the reactions of the old, wild, long-vanished life.

The domestic cow hides her new-born calf. This is a useless precaution in human pastures. It is sometimes worse than useless. For it sometimes results in the death of the young. But in the danger-filled life of the past, where a hundred hungry mouths watered for every calf that came into the world, this practice of the mother of retiring to some hidden place when she gave birth to young was an exceedingly useful precaution. Domestic fowls hide their nests for the same reason.

Mother cows, horses, sheep, hogs, and other domestic animals always become strangely ferocious when young are born to them. They are ready to attack any one or anything that gives evidence of an intention to come too near their babies. They used to seem to me as a boy entirely different beings at such times from what they were ordinarily. And I can remember now how I used to wonder at the strange transformation. If I had asked any of the unzoological people around there what caused it, they would probably have told me that it was "just natural" for them to be that way. Everything, however, is natural. And there is also a reason for everything, an explanation, if we can only find out what it is. Whenever we see an organism, animal or plant, doing a certain

thing or doing a thing in a certain way, or having a certain form or structure or nature, we may rest assured that there has been some circumstance or necessity in the life of that organism or in the life of its ancestors that has caused it. This tutelary instinct is strong in the parents of domestic animals, especially mothers, although largely in the way, because there has been a time in the past when it was indispensable to the species. Infancy is the time of the greatest mortality in all animals, including man. And those species have survived and prospered that have minimized this mortality by developing in the mother a superb love and anxiety for her children.

Mother love among men is the same thing exactly as mother love among birds and quadrupeds. Human mothers love their young more than human fathers do as a general thing, and love their own children more than they love the children of other human mothers, because the human species has evolved from beings with great mother love. Mother love is not a human invention. It is an importation. The mother monkey loves her child with almost the same divine fervor as does the human mother. When a monkey child dies, the mother carries the little corpse around with her for days, refuses to eat, and sits often in silence and grief. Mother love is stronger than father love, because in the wild times in which it was generated, the mother was the only one present at, and taking part in, the birth act. The idea that is often passed around

that the human mother loves her young so much, and more than any one else does, because the child is a part of the mother's body, is nonsense. If the sex relations of the animal kingdom had always been monogamic and the father had always been present at the birth of the young, it is probable that he is the one who would have been charged with this tutelary function rather than the mother ; for, among vertebrates at any rate, the father is the larger and stronger of the two, and the one more capable of rendering protection. Among some fishes the male assumes all the care and anxiety of parenthood ; and this is true in the case of at least one family of birds (*Phalarope*).

Among all monogamous animals, birds and men alike, parental anxiety is more evenly divided between the sexes than it is among those races in which promiscuity is the rule. In very early times, before marriage had come into practice among men, the child took the name of the mother and belonged to the mother, the father being a wanderer and unknown. Man later usurped woman's place through his greater physical strength, enslaving woman and causing the child to take his own name. But man has never developed the great love for the child that was developed in woman in those prematrimonial ages when the father was a renegade, and the preservation of the species through the preservation of the young fell so heavily on woman.

Parental love is an expediency of evolution. It is one of the instincts that has enabled species

to survive in the struggle for life. And whether it is congested in one sex or the other, or evenly divided between the two, or is absent altogether, depends on the remainder of the evolutional factors. An animal that lays a thousand, or ten thousand, or a million eggs at a time does not have the same need of parental solicitude as one that produces but a single egg at a time.

The practice sheep have of imitating the movements of those in front is a survival from the past. This practice never would have been developed in animals living in the environment in which domestic sheep usually live. Sheep are mountaineers. They came from the highlands. In their pre-domestic existence they lived in flocks, each led by a wise old ram of experience and courage. The life of the flock often depended on the skill and fidelity with which the members of the flock copied their leader. And the practice sheep have of following and imitating their leader was acquired no doubt through the necessity when pursued of leaping over the same chasms and obstacles that their chief leaped over, whether they could see the reasons for it or not. Those who did this survived in the struggle for life, and those who did not do it went down or were destroyed.

Young lambs and kids leap and gambol a great deal in their play. I have noticed young goats that were being led along the streets keep up an intermittent bounding as they went along, leaping first one way, then another, sometimes straight up into the air, as if they were worked

by some unseen spring that went off suddenly inside of them. How strange such conduct must have seemed to the pre-Darwinian. But to the evolutionist it is as plain as day. It is an apprenticeship for a life long left behind. The nervous and muscular systems of goats received their finishing touches among the mountain crags, whither these animals had been driven by the murderous mouths of lowland carnivores. Lambs and kids run and leap in their play for the same reason that the young of men, dogs, and lions scuffle and fight and chase each other. Play is nature's schooling. It is a preparation for, and a prophecy of, the life to come. Whenever there is any chance for it, lambs and kids always choose a steep bank or other incline as their play-place. A bank is a mimic mountain-side.

The disposition of the goat to climb up on hay stacks and on the roofs of low buildings and to subsist on all sorts of impossible things is a peculiarity which it has brought with it down to the plain-lands from its original home among the peaks and pinnacles on the roofs of the world. A hay stack is a mountain eyrie—a place from which this child of the clouds can play that it is viewing the world. How tame the lowland earth must seem to souls born in the sky. It is said that the King of Babylon built wonderful hanging-gardens and artificial highlands to keep his Medean wife in the flat valley of the Euphrates from becoming homesick for her native mountains. How much of our heart-

hunger is from the past. It survives from a life left behind. We are but images worked by wires stretching back through the centuries that are gone. We are each a little more than a series of concentric spectres. The love of children for tree-climbing and swinging and robbing birds' nests and the general craving of mankind for the wilds, the waters, and woods, are but reminiscences of the old, wild, tree-dwelling life from which we have been by the accidents of evolution so recently ejected. The cradle and the rocking-chair are artificial tree-tops. Human beings never would have invented these things, because they never would have had elements in their psychology calling for their invention, if our ancestors had not been arboreal.

Chickens roost in trees, either real or artificial, not on the ground, as ducks and geese do. They have also the habit of sleeping night after night in the same place, like crows and blackbirds. Take young chickens and put them to roost in a certain place two or three times, and they will roost there of their own accord after that.

The ancestor of the domestic chicken is the jungle-fowl of India (*Gallus bankiva*). It is dark-red in color, sleeps in low trees, and roosts night after night in the same place. It nests on the ground, and the female has the same habit of cackling when she has laid an egg as her barnyard sister. Polygamy prevails. The males are exceedingly pugnacious, and sing to the sunrise just as their town-dwelling descendants do the world over to-day.

The domestic hen hides her nest. She also has the habit, when she has laid an egg, of announcing the fact by cackling. It looks as though these two habits would in practice have the effect of neutralizing each other. But we must remember in seeking explanation for the habits of domesticated animals that these habits were for the most part laid down in the psychologies of these creatures under circumstances very different from those surrounding them to-day. The hen as a wild bird laid her eggs in a secret nest and cackled, long before there were any beings as intelligent as men on the earth. I notice that when the hen cackles, the rooster cackles too. And it has occurred to me that this duet has in the wild state the purpose of announcing the location of the two individuals to each other. Wild chickens live in families, each composed of a single male and several females. The male is very jealous of his wives, and very gallant and loyal to them. He regards himself as their natural lord and protector. When a member of his harem has retired to her nest to lay and announces by cackling that she no longer has occasion to be alone, the male cackles in response to let her know where to find the rest of her family, which would in the meantime often have drifted some distance away. I have noticed that the rooster is more or less nervous and anxious on these occasions, and cackles generally to members of his own family only, not to members of neighboring harems, both of which facts would seem to fit in

with the theory that he is working for the return of the missing one of his half-dozen or so.

The most advanced races of the domestic chicken have almost entirely lost the nest-hiding instinct, which is so strong in their wild ancestors. They have also extended their egg-laying to all seasons of the year. The domestic fowl is a bird. In the wild state it has the common practice of birds of laying a nest of eggs in the spring and hatching them, and then laying no more till the next spring. But by selection breeds have been developed in which egg-laying is perennial. If we continue to hatch eggs by artificial hens and to select for breeding purposes those more intent on egg-laying, we may develop hens after awhile that will lay contentedly the year round and without any desire to "set," or cluck, or hover their young. Domestic selection, in both animals and plants, is in its infancy. And only those with the souls of seers can even dream of the miracles that are destined to be wrought, by man on himself and by man on the races associated with him, in the ages that are yet to dawn on this globe.

I wonder how many of those who have associated with pigeons have ever thought why these birds do not light in trees, and why they do not build their nests in trees as birds usually do instead of in artificial apartments created by man. All of the something-like 200 different varieties of the domestic pigeon have come from the rock dove, a bird which makes its home among the sea-cliffs of continental Europe. The

domestic pigeon builds its nest in grottoes, because its ancestors were cliff-dwellers and built their nests in grottoes. It prefers the house-top to trees because a house-top or a gable is a more satisfactory pinnacle than a tree. If the pigeon had been domesticated in America instead of in Europe, it would have had for its ancestor the wild pigeon which once lived in such numbers in the forests of eastern North America. Then, it would have been a haunter of the boughs, and been a very different being from the cooing cave-dweller who to-day lives among the artificial fastnesses of our streets and barnyards.

The domestic hog came from the wild boar of Europe, the western breeds anyway, those of China and the East probably being descended from the wild pigs of India. In the wild state these animals live in small droves, feeding on roots and bulbs which they unearth with their short, powerful proboscis. They are polygamous in their family relations. Like their not very distant relative, the rhinoceros, they are swamp-loving animals, rooting and wallowing in the soft mud, and sleeping or meditating during the heat of the day. They manifest a recklessness and an unfailing loyalty to each other in times of danger, risking their very lives to help each other when the alarm-squeal is sent out. They attack their enemies with raised bristles and hair-raising "whoofs." When a mother and her young are surprised by some sudden danger, the little ones by instinct drop flat and motion-

less in their tracks, while the mother proceeds to deal with the situation with unflinching courage.

Any one who has ever associated with hogs knows how faithfully the domestic breeds have held on to the instincts of their ancestors, even though these instincts have been largely superfluous since they have lived in a pen. It was often the wonder of my boyhood to see little young pigs become suddenly inanimate—to see them drop flat on the ground and lie there as motionless as if they had been pasted there—when some event supposed to have danger in it came upon them. The bristles and war—"whoofs" of hogs are the war-paint and war-whoops of men. Many animals add to their chances of success on going into battle by making themselves look as alarming as possible. The dog growls and shows his teeth, the bull bellows and paws the earth, the cat gets its back up and "spits," the goose hisses, and the gorilla yells and beats its breasts with its fists.

Every one is familiar with the pig's favourite exercise—excavation—and its fondness for day-dreaming in moist earth or mud. I am always sorry for a pig in a pen, not merely because of the thought that its temporary existence is to be ended by assassination, but because of the meagre opportunities afforded for the expression of its instincts. It is confined to a world a few square yards in extent, and is absolutely dependent upon the thoughtfulness of its captors, who are generally so selfish and ignorant of kinship that they would smile at the

thought of compassion to a pig. About all it can do is to upturn the floor of its prison time after time, as the days go by, grunt for companions who never come, and wait for the butcher's knife. Pigs dig, goats gambol, and dogs and men hunt and fight, when they are released from the cares of life and have nothing else to do. These are all instances of the survival of the wild.

Geese call and flap their wings at migrating time; horses "run away" when frightened; and park quails scratch the floor of their cage when feeding as they were accustomed to scratch for their food in the thickets and grasses. There are hundreds of such survivals of wild life in the psychologies of domestic animals. They persist, though often in a dwindling condition, in accordance with that conservative tendency of the universe which in living organisms we call Heredity.

But man also was once a wild animal. And it is impossible to understand the things men do—many of them are so horrible and idiotic—unless we take into account the fact that this agricultural and town-building being whom we see when we look in a mirror was once a literal beast of the field, clothed in natural hair, without mercy, modesty, matrimony, or religion, living on roots, fruits, honey, and birds' eggs, and contending doubtfully with other animals about him for life.

Take the killing instinct. It exists in nearly all men, high and low. This instinct is purely anachronistic among people advanced enough to generate a moral code. It is a vestige—a survival

of the wild life from which all so-called civilized people have come. Hunting, fishing, and fighting are the three chief occupations of savages. The savage never hunts for pastime, however, but in order to live. He takes the lives of the beings around him in order to use their bodies for food and clothing. But civilized men have the practice of getting their food and clothing through agriculture, manufacturing, and other peaceful industries. The hunting instinct is, therefore, left over. It is unprovided for in our daily lives. On holy days and vacation days, when we are relieved from the ordinary duties of life, this instinct comes up for attention and exercise, and we go out and kill for "sport," as we call it. The civilized man hunts for the same reason that the collie kills sheep—in order to exercise a left-over instinct which has been presented to him by his wolfish ancestors.

Hunting and fishing among non-human animals and savages means the suppression of other beings for nutritive purposes. But among civilized men, especially the well-fed, they are carried on in obedience to a superfluous instinct which has persisted in our nature from savage times. They are the most inexcusable of all known crimes. No community can lay any claim to being civilized that fails to prohibit them by law. It is bad enough in all conscience for one being to suppress another in order to make a meal of it. But when such suppressions are committed by wholesale, *and just for pastime*, they are beyond characterization. No other

species of animal plunges to such depths of atrocity. Even those synonyms of soullessness, the serpent and the hyena, do not exterminate for sport.

Hunting and fishing for pastime are the most horrible of all the survivals of savagery. *They should be forbidden by law.* It is an everlasting disgrace to our time that we still linger in that stage of near-savagery when any low-browed irresponsible who can get a gun in his hands is allowed to go out and shoot to death everything that has the breath of life in it.

We have recently had an exhibition of savagery by an ex-president of this republic which should provoke regret and condemnation from every one who is able to rise above the primitive ways of looking at things. This expedition has been staged with all the megaphonic accompaniments for which this man is notorious. Mr. Roosevelt is a man of force and shrewdness. But he has in his psychology, and rather prominently too, about all of the essential instincts of the barbarian. He is perfectly selfish, an imperialist from the word "go," and so constituted that he would rather kill than eat. The one great check to his primitive instincts is his incomparable appetite for applause. He will do anything almost, even shelve some of his most precious impulses, in order to gain the hurrahs of men.

Mr. Roosevelt's African expedition is a disgrace to civilization. It was a pure exercise in butchery. And the fact that he could come back from this massacre, dripping with the blood of

innocent thousands, and be applauded as a hero is *prima facie* evidence of our lack of maturity. If we were an adult people, instead of children, we would condemn him for his inhumanity instead of throwing up our hats to him. The fact that the expedition was carried on in the name of "science" need deceive no one. The scientific aspects of the expedition were about as genuine as the patriotic pretensions of Napoleon when he assassinated the French republic and made himself dictator.

Roosevelt has done more in the last twelve months to dehumanize mankind and to resuscitate those impulses in human nature which we are all the time trying to keep down than all the humane societies can do in years to counteract it. Boys and young men the world over have been led to look upon killing as legitimate and manly. It is much easier to drag men down than it is to lead them to a higher moral plane. The fact that Mr. Roosevelt has held one of the highest official positions in the world gives him a special power for corruption.

The world is growing. Humanity is in its teens. Out of the future are certain to come beings of far higher character and understanding than we are—beings who will reverse present day judgments and ideals, and who will recognize such bloody expeditions as Roosevelt has just been engaged in in Africa as needless and diabolical. It is the verdict of all history that it is a comparatively easy matter to deceive one's own generation; but you can't fool posterity.

The fighting instinct persists so strongly, even in élite peoples, that all our games nearly and even our systems of industry are arranged on the plan of a battle. We like to fight so well that we arrange figurative battles where we can go and have the approximate pleasure of pounding somebody by watching somebody pounding somebody else.

The fear, suspicion, and resentment which human beings generally have toward strangers is an instinct which has survived from tribal times, when every stranger was an actual enemy. If a man cannot talk our language, there is an instinct within us which prompts us to appraise him lower than we would if he could talk to us. It is probably a phase of this same instinct which causes us to be disposed to pick at, and make fun of, or even abuse, a person who shows any distinct originality in dress or manners. The Lord pity the Exception, in a world like this, where the tendency is to reduce everybody to the same common denominator. If we were as nearly full grown as we think we are, instead of the intellectual bib-wearers that we are, the Exception would be a favourite, because he would be recognised as an indispensable aid to progress. If men did not vary, they could not evolve.

Lying, cheating, stealing, revenge, promiscuity, pugnacity, and laziness were all honourable and more or less useful among primitive men, but are anachronistic in these more mutualistic times. They are vestiges. They survive in spite of their inconveniences, like the vermiform appendix and

the sheep killing propensity of the dog. We are compelled to endure and deal with them to-day. But they are destined to pass away, as the ages go by, under the influence of a tireless and unending Selection.

The practice men have of suppressing other animals for furs, feathers, and food is a survival from the more primitive past. We can hardly conceive of such a practice originating to-day, with our improved notions of art, our widened sympathies, and our better knowledge of foods, and especially since the discovery of evolution and all that it implies. The practice is under a pretty heavy fire at present, and it is destined to encounter still greater difficulties in times to come, as the humane instincts mount higher and reason grows more influential in the psychologies of men. The suppression by man of other animals for nutritive purposes is the survival of a suppression which once included men themselves. All beings whatsoever outside of the tribe, both human and non-human, were originally lawful prey for anyone who could "bag" them. Men of other tribes were the "big game" of those days. We to-day have moved up a notch. We extend the amenities of the tribe, in a more or less formal way, to the whole human species. But we still deny these amenities to other species.

The study of origins and survivals, therefore, is one of the most important subjects in the science of conduct. It enables us to understand the nature of the raw material with which we have to deal. It enables us to realise how much

of us antedates the Alps, and why our favorite activities are sinful. The great work of the sociologist and teacher is revision. It is also the great duty that confronts all of us as individuals. We should get out an inventory every now and then of what we think and feel and do, and see how much of it should be left out in the interests of truth and humanity. We should remember that the presence of an instinct within us is no reason whatever why it should be acted upon. Our minds, like our bodies, contain much that we would be a great deal better off without. If we were of divine manufacture, we could afford to be natural, we could afford to be indiscriminate in obeying the impulses that rise within us. But as it is, it is in accordance with the higher life to decline many invitations to act. It is our duty, as regents of this world, to pick ourselves to pieces and see what we are composed of, and then go to work and weed out and modernise ourselves in the light of this analysis.

15. THE BIOLOGY OF CHILD NATURE

There is a law in biology called the Biogenetic Law. It was discovered by Haeckel. It is one of the most important laws of the organic world. It is this: *Each organism in its individual development repeats the life history of the race to which it belongs.*

No being comes into the world full grown. Every being goes through the process of what is called *growing* before it is a complete organism. Every being commences as a small, simple, and rather shapeless bit of protoplasm. The gulf between this condition and maturity is bridged by a longer or shorter series of changes in size, form, and architecture. The remarkable thing about these changes is that they are strikingly parallel to the changes which the race has undergone in its evolution from the beginning of life on the earth.

Every animal starts at the same place—as a one-celled animal—as an organism identical in structure with the simplest protozoan. This is the so-called *egg*. The whale and the elephant, although as adults they are the mammoths of the animal world, begin as beings so small that they cannot be seen with the naked eye. Every human being, it makes no difference how pompous or important he may become before he gets through, starts as a microscopic speck about $\frac{1}{125}$ of an inch in diameter. Apes, crabs, jelly-fishes, and men are so much alike at first that they cannot be distinguished from each other even with a microscope.

Every animal begins as a single cell because the first inhabitants of the earth were single-celled animals. Every animal goes back to the beginning of life to commence its existence. The egg is the first stage in the recapitulation which each animal makes of the development of its race.

The first thing an animal becomes after it is an egg—unless it is a one-celled animal, in which

case it remains always an egg—is two cells. These two cells, by division, become four; these four become eight; and so on, the cells dividing and re-dividing, until the embryo becomes a many-celled ball, consisting of a single layer of cells surrounding a fluid interior. This little ball of cells is called the *blastula*. As the cells grow and multiply, a dimple forms on one side of this ball. The cells are pushed in. This dimple deepens to a hollow, and changes the ball to a doubled-walled sac. This is the *gastrula*—the permanent structure of the sponges and corals, and an almost invariable stage in the development of all animals above sponges and corals. The gastrula becomes a worm (or an insect or a fish through the worm) by elongation and enlargement. The inner layer of cells of the gastrula develops into organs of nutrition and reproduction, and the outer layer into organs of protection and sensation.

Everything we know of the science of development goes to show that the foregoing is the order which has been followed by the animal kingdom as a whole in its development.

The worm stage in the development of insects and the fish stage of frogs are well known to everyone. The most of the so-called "worms," which we see everywhere about us, and which are so terrifying to many people, are not worms at all, but baby butterflies and moths. The worm stage appears in the individual development of insects, because insects as a whole have evolved from worms. And every individual frog is a fish before

it is a frog, because frogs, in the accidents of evolution, have been made out of fishes. The young frog, the so-called *tadpole*, is a fish, not only in form and locomotion, but also in its internal architecture. It has a two-chambered heart like the fish, breathes by gills, and has fish-like kidneys and circulation. The adult frog has a three-chambered heart, breathes by lungs, and performs its locomotion by means of legs.

All back-boned animals above fishes (frogs, reptiles, birds, and mammals, including men), have gills at a certain stage of their development. Reptiles and birds pass through this stage in the egg, and mammals during their development within the parental body. All vertebrates as individuals pass through this stage, because the vertebrate phylum as a whole has passed through it. Fishes were the first vertebrates. Before there were any frogs, reptiles, birds, or mammals in the world, fishes were the most powerful and intelligent beings on the planet. They ruled the planet, as reptiles ruled it at a later age, and as men rule it to-day. The higher vertebrates developed from fishes—first the frogs, and from these the reptiles, and from the reptiles the co-ordinate branches of feathered and hairy animals, that is, the birds and mammals, including men.

Salamanders usually breathe by gills in early life and by lungs as adults, as do frogs and toads. There is a certain terrestrial salamander, however, which differs from other salamanders in omitting the gilled stage. But the young pass

through this stage just before leaving the body of the mother.

Additional evidence that the embryonic gills of vertebrates are in reality what they seem to be is furnished by the fact that they are supplied with blood vessels leading to them from the heart just as in fishes. These blood vessels branch in pairs from the aorta, one for each gill. They are called gill or aortic arches. A single pair of these arches remains in the adult frog, the rest atrophying. The arch of the aorta towards the *right* in birds and toward the *left* in mammals is the survival in birds and mammals respectively of the right and left arches of the frog, one of the frog's two arches being absent in each case.

At one stage of development every human being has a long tail like the monkey, and four limbs all alike. At this stage there are no arms and legs, nor hands and feet, but front legs and hind legs, and front feet and hind feet. It is the stage of the quadruped. Not only at the beginning of their existence but for a considerable distance on their journey of development, lions, monkeys, birds, and men as individuals are so much alike that they cannot be told one from another. This is because lions, monkeys, birds, and men as races travelled together in all the earlier stages of their evolution and separated into distinct groups of animals only in comparatively recent times.

The vermiform appendix in the human embryo is, in accordance with the Biogenetic Law, larger than it is in the adult.

The human foetus at the age of six months is

covered with a thick growth of hair. This fur covers every part of the body except the palms of the hands and feet. It covers the face and ears and the body generally, and appears on both males and females. It is called the *lanugo*, and is shed before birth.

The horns of the stag are a recapitulation of the geological history of the deer family—first the prongless horn, then one prong, then two, three, and four.

The development of the heart in the human embryo also follows the order of its development in the animal kingdom—first the one chamber, or even more primitively the pulsating tube, as in worms, then the two chambers of fishes, followed by the three chambers of frogs, and, finally, the four chambers of birds and mammals.

The development of the individual is not a complete repetition of the race. There is necessarily a good deal of paraphrasing. The stages are in the individual much more condensed and simplified, the more expensive ones being often omitted altogether. For it must be remembered that there have been changes and adaptations in accordance with the laws of economy and selection in the development of individuals the same as in race development.

The Biogenetic Law applies to mental phenomena as well as to physical, and only in the light of this law is it possible to understand the many strange and absurd instincts that come and go during human infancy, childhood, and adolescence.

It has been said that the child is a born savage. This is not quite true. It is worse than that. The human babe antedates the savage by several hundred thousand years at least. The child is a born ape. Only after a rather long and inglorious preliminary as a quadruped is it able to walk with its front feet in the air and rightfully lay claim to the title of savage.

One of the earliest instincts displayed by the human infant is the instinct to cling to everything that comes within reach. No one, I presume, has ever associated with babies for the first time who has not been surprised at the strength and persistence with which they hold on to anything they get their hands on. If there is nothing within reach for them to cling to, they generally keep their hands closed tightly in imitation of the act of holding on.

A human infant an hour old can support the entire weight of its body for several seconds hanging by its hands. Dr. Louis Robinson, an English physician, found, as a result of sixty experiments on as many infants, more than half of whom were less than an hour old, that, with two exceptions, every babe was able to hang to the finger or to a small stick and sustain the whole weight of the body for at least ten seconds. Twelve of those just born held on for nearly a minute. At the age of two or three weeks, when this power is greatest, several succeeded in sustaining themselves for over a minute and a-half, two for two minutes, and one for two minutes and thirty-five seconds. This is better than most human beings

can do when they are full grown. If you don't believe it, try it.

There is a reason for everything, if we can only find out what it is. And there is a reason for this holding-on instinct of human infants. It is the instinct of the monkey. Men ought to venerate the trees. We ought to take off our hats in reverence whenever we go out into the forest. For up there among those swaying branches was the cradle of both human physiology and psychology. It was in the forest that man acquired hands and perpendicularity and became distinctly human in form.

The young monkey for some time after birth clings tightly to the hair and neck of its mother. The muscles of the forearms, which move the fingers, are remarkably developed at birth. For on the strength and endurance of these muscles depends largely the life of the little ones during the mother's travels in the trees seeking food, shelter, and safety. Alfred Russell Wallace once caught a young monkey and was carrying it home in his arms. The little one's fingers happened to come in contact with the naturalist's whiskers, and it held on so tightly that he had the greatest difficulty getting it loose.

Human infants have this same remarkable development of the forearm muscles at birth and the same instinct to hold on to everything they can get their hands on. They even go so far in paralleling the instinct of the baby simian as to show a decided preference for hair. How strange! How these old spectres of other days keep bobbing

up in our natures! The first thing a human being tries to do on coming into the world is to get hold of the limb of a tree or the hairy form of his mother, although since those old days when these instincts were generated men have left the forest, cradles and incubators have been invented, and human mothers have got into the habit of wheeling their young around in carriages.

I would suppose, not from any observations of my own but merely from thinking about it, that babies in their earliest days should have something to hold on to in order to enable them to exercise this clinging instinct—something more convenient than the bed clothes and more heartily co-operative than the paternal beard. They must suffer frequently from a lack of facilities of this kind, just as we all suffer from the inhibition of any important desire of our nature. Babies, for some time after they come into the world, are limited in their expressions to undifferentiated open-vowels. Their language is pre-human. It has the ambiguity of the grunt, the chuckle, the bleat, and the howl. And there is really no way of knowing for certain what feelings and ideas trail through the budding centers of their consciousness. But if I were attending a baby, and it got a pessimistic spell, and no pins were found and paragoric failed, I should certainly, as a last resort, try the experiment of getting something into its little monkey fingers for it to hold on to.

Human beings at birth are quadrupeds. Their earliest locomotion is on all-fours. The natural position of the thighs is at right angles to the

general direction of the body, not straight out as in adults. The feet turn inward and the big toes have a thumb-like opposability to the other four, as in apes. When anything is taken forcibly out of the hands of a very young human baby, it will cry out. It is the alarm-cry of the lost. The thing which it held in its hands and from which it has been detached was its *mother*.

Put a stick into the hands of a child just able to toddle about, and see what it will do with it. Does it use it as an object of admiration, or as a cane, or as a precious gift to present to someone who is very dear to it? Not a bit of it. The stick is a *club*. It is used as a device for knocking the brains out of things. Anything is used as victims for this exercise—floors, chairs, china, window-panes, and human beings. The cat is a frequent sufferer from this form of infantile advertisement.

The club was the first weapon of the savage. And in this tiny manikin of a few months' hammering the cat with a broom-handle we see dimly that half-crouching, hardly-hairless ancestor of ours beating the life out of the feebler of his enemies with the limb of a tree. In the club-stage the more powerful enemies of men were dealt with by getting out of their way. Man is not big enough to become the king of beasts without a more effective supplement than the club. He requires the spear and the far-flying arrow. But the emancipation of the front limbs from the drudgery of locomotion and their pro-

motion to the business of handling things marked the beginning of the human conquest of the planet.

The child's love of fire, especially the camp-fire which he builds himself and sits around at night fall, no doubt harks back to those far away times when fire was new. The making of fire was an invention. In the old pre-human world fire was scarce. About all of it there was in the world was what was started by volcanoes or lightning. Volcanoes are rare on the earth's surface and erupt only at considerable intervals of time; and lightning acts only in storm, when the conditions for ignition are unfavorable. Even if a fire were started by lightning it would likely be put out by the rain. When man invented the art of making fire artificially by rubbing two sticks together, he had a new power in his hands. He could cook his food. He could burn and terrify other animals. He could keep warm. He could fall down and worship the great transformer. He could wander into the temperate and frigid parts of the earth, and carry his climate with him; for everything we know of man goes to show that in his origin he was a tropical animal. Haeckel thinks that man originated somewhere in Southern Asia, or in lands located still farther south in regions now drowned by the Indian seas.

No wonder the child loves fire. I can remember when I used to pilfer matches and take them out behind the house and strike them privately on an old stove. No wonder the child loves the camp-fire. The camp-fire was the ancestor of

the hearth—the nucleus of the first human home—the first bright spot in that dark world out of which our far-away forefathers groped their way so long ago.

It was probably after the invention of fire that man acquired the practice of using the flesh of other animals as food. Man originally lived on fruits, nuts, leaves, and birds' eggs, as the monkey does. This is indicated by the architecture of his mouth and digestive organs and by the child's natural preference for fruits and nuts. If men had used flesh foods before he used fire, he would have had to acquire a liking for uncooked flesh, and this liking would no doubt have persisted. But it is the cooked flesh that appeals to the human palate—except certain kinds of dried or smoked meats, which the savage could not have produced in a hot climate without salt.

This, then, is another primitive survival in the human child—the instinct for the bloodless diet. Happy would it be for this world, both for men and for their victims, if human young were never encouraged to recover from this beautiful, primal impulse from which we have fallen.

The poverty of language in the child is a savage characteristic. There is in the child of the higher human races the same simplicity of expression, the same absence of syntactical skill, the same reliance on signs and gestures, and the same tendency to form words by the mere repetition of a syllable, as have been so often noted among primitive peoples. Such words as

papa, mamma, goo-goo, etc., are not accidents. They represent a method of word formation that is known as *reduplication*. Reduplication is very common among primitive peoples, from 20 to 80 times as common as among civilised races, according to Lubbock.

Savages cry easily, are amused at simple things, love toys and pets, and are notoriously unreliable—in all of these particulars being much like the young of more mature races.

The fear of darkness, so strong in every child, is a survival from that distant past when the darkness of night was unbroken by man, and was filled with real enemies, both human and non-human. The darkness of civilized lands, especially the darkness of human bedrooms, which children fear so much, is without dangers of any kind. But to the savage, night was a very different thing. It was a big black abyss infested with all sorts of terrible things with teeth, ready to leap on to him and eat him up if he went into it. It is certainly a strange thing—this coming back to us of the ghosts of times long past and gone.

There is a gang instinct in children, especially in boys, which very much resembles the tribal instinct of primitive men. It is no doubt a survival of this old savage instinct. It appears in boys from twelve to fifteen years of age. At this age boys tend to gather themselves into bands of greater or less definiteness, headed by some larger boy as chief. A boy entering a band of this kind gives up much of his own personality.

He becomes irresponsible, and acts largely from the promptings and ideals of the band. He exchanges his own feebleness for the energy, standing, and power of the pack. These bands in their spirit and activities very much resemble the spirit and activities of the tribes of savage men. There is the same hostility to strangers, the same love of exploit and adventure, the same disregard for the property rights of those outside the band, the same appeal to might, the same tendency to attack other bands, the same savage ideals of heroism and glory, the same bullying and marauding, the same lawlessness and disorder, and the same absence of all the higher ornaments of human character generally. The boy at this age longs to be a pirate and a cowboy. He likes to raid melon patches and run away from home. He admires barbarous and dare-devil deeds. Stealing is an actual pleasure, like eating. Many boys would rather raid a neighbor's orchard for what apples they want than go to their own pantry and get them. Everything is against this instinct. The boys are born breathing the very air of internationalism and universal citizenship. But it is strong enough to show itself very plainly, especially in communities where the ideals of adults are not well formed and the vigilance of parents and teachers is lax. How strange! How anachronistic it all seems! But it is plain to the evolutionist. It is the tail of the monkey on the human embryo and the gills of fishes on mammals and birds!

The tendency to throw stones, especially at strangers, cats, and other animals alien to him, the snowballing of peddlers, and the strong love in every boy's heart for the bow and arrow, are probably survivals. I can remember when we boys used to choose up sides and get on opposite banks of the stream and throw long weed-stems fashioned like spears at each other. Sometimes we would whittle the root into a hard, sharp point, and make the blood come with it. I have a scar on my hand now that was made by a wound which I got in one of these boyhood battles. We never seemed to mind our wounds much. They merely stirred us up and made us more anxious to "get even."

The child's rattle is the sacred gourd or castanet of primitive peoples, which has degenerated to a toy. No savage baby uses a rattle. The rattle is the sacred and mysterious accompaniment of medicine and ceremony. Tossing half-pence, which used to be a sacred and solemn mode of consulting the oracles, has now, in like manner, become a mere game for children.

Boys and girls are generally lacking in self-control, reason, gratitude, sympathy, honor, breadth of mind, public spirit, and regard for law. All of these absences are savage survivals. How hard it is to teach children to even go through the form of saying "thank you." I have myself many times been shocked by the utter absence of all gratitude in boys and girls of considerable age. One may help them and do for them day after day for months and almost

give one's very life blood for their benefit, and they will regard it all as a mere matter of course, and forget all about it in a week.

In strong contrast to these negative qualities is the instinct of loyalty, which is usually strong in both sexes. Boys will stand by each other and protect each other even in crime. It is the loyalty of the savage to his tribe. In the fierce times gone by men stood by each other and helped each other because it was the only way they could stand. Every teacher knows how difficult it is, when a misdemeanor has been done by a member of the school, to find out who did it. It is the primitive instinct of self-preservation, which in this case, as in so many others, has long ago lost its usefulness.

Man in his origin was a tropical animal, and for many thousands of years must have been confined entirely to the warm parts of the earth. He lived, as many tribes still live, without clothes or fixed habitations. He probably haunted the streams, which were natural clearings in the great forests stretching everywhere about him. He was probably much in the water. And I have sometimes wondered whether the boy's love for the water, his affection for the old swimming-hole, is not a recapitulation of those old times gone by. This instinct is much stronger in boys than in men—almost as strong, as I well remember in my own case, as the impulse to go barefooted or fishing in the spring.

The barter instinct, so strong in boys of a certain age, is undoubtedly a survival from the

past. Every savage loves to trade. And there is a time in the life of almost every boy when this instinct is a mania. His pockets are his store rooms. These are filled with the most varied assortment of knives, marbles, buttons, strings, odd bits of jewelry, anything and everything, which he carries around to "trade on." The hunting and fishing instincts, which are especially strong in boys, much stronger than in girls, are savage survivals. These instincts are particularly strong in the spring for some reason. It may be because the spring was the time for the annual raids by savages on the life around them, or it may be merely the cumulative effect of long inactivity during the ice and cold of winter.

The general ideas of the child, its conception of itself and its outlook on the world, are essentially the same as those of the savage—narrow, mystical, and naïve. The child believes in ghosts, fairy-tales, magic, and miracles, much as the savage does. It has no understanding of natural law. When Magellan in his memorable circumnavigation of the earth was off the South American coast, the natives thought that the small boats which came from the Spanish ships to the land were young ones, and that when these small boats lay alongside the large boats they were being nursed by their mothers. These are just such ideas as the child would have about these things.

Every one can go back in his own mental evolution to a time when his ideas were essentially those which prevail among primitive men

everywhere. Through my father's farm flowed a brook with many windings. On one side of each bend was a steep bank eroded by the stream, and on the other side was a low, flat, filled-in bottom. One of these filled-in places I remember very well. It was covered with a thick growth of elder and dog-wood bushes over which climbed wild grapes and wild cucumber vines in profusion. I remember walking along on the bank one day and looking down there and thinking to myself that that jungle ought to be cleared out, for the Indians were liable to get a start in there, and if they did they would probably spread all over the country. A mind with as little understanding as that is on a level with that of the South Sea Islander who planted the nails which Captain Cook gave him in order to raise a crop.

These are some of the instincts which exist in the psychology of human young as survivals of stages of development which our part of mankind has left, or is fast leaving, behind. They are the ghosts of vanished generations. They come back to us in obedience to the Law of Biogenesis. They add immensely to the problems of the parent and teacher. They must be dealt with—tolerated when it is impossible to do anything else, counteracted when it is necessary, and especially transmuted into forms that will be less harmful to the young and less offensive to those around them.

These instincts appear not only during the growing years of men and women generally, but persist often into the years of adult life. In all

the higher societies of men there are individuals whose mental make-up is so belated that they never rise during their lives more than slightly above primitive men. These are the laggards of civilization. They provide a large part of the business of courts and prisons. And, when the time comes, they will be one of the first subjects to attract the attention of the science of human eugenics.

Every parent and teacher should have eagle eyes for the tribal instinct of the young. Boys by the thousands are made or ruined by this instinct alone. It is almost impossible for one who has never had the experience to realize how completely boys are at the mercy of the ideals of their tribe. The indifference of parents in regard to this momentous matter is actually criminal. Guard your child from the lure of bad company as you would guard him from the jaws of lions.

The influences of the school and the home are only a small part of the influences that mould the lives of men generally. Bill-boards, newspapers, nickel-theatres, books, and especially the associates of the young, all have a powerful influence on character, and may even counteract the weak and desultory influence of the home and the school. Happy is the boy who has a vigilant, affectionate, and intelligent mother, and a father who is not too absorbed in money-making to give a little attention to the destinies of his children.

Much of the savage spirit, especially in boys, may be spent harmlessly in organised play and

work. Play has been called an inoffensive form of disorder. A good game is a moral prophylactic, developing not only health and strength but fair play, loyalty, self-restraint, justice, courage, and whole-heartedness. No person can lead a moral life with a crippled stomach or liver. Golf is one of the best games so far invented by the human mind.

The most difficult fact in human adolescence with which the parent and teacher have to deal is that of sex. Owing to the highly-peculiarized relation which has grown up between the human sexes the science of reproduction is tabooed everywhere among men. It is omitted from text-books on human physiology and ignored by parents and educators. We have hitherto proceeded on the assumption that ignorance on this subject is the best policy. Disaster has resulted. Seventy-five per cent. of juvenile delinquency has its source in the perversions of this impulse. The sex instinct is out of all proportion to the needs of the race. This leads to intemperance, abuse, and sex disorders of all kinds. There is a strong tendency toward promiscuity, inherited from more primitive times. This tendency, together with the sex poverty of the unmarried and the hard conditions of life which prevail, engenders the most loathsome vices and diseases, sapping the physical and moral strength of tens of thousands.

We have tried ignorance. It has failed. Now let us try enlightenment. It is impossible to keep the young ignorant even if it were desirable to do

so. And it is incomparably better that boys should get their information pure and in a scientific and legitimate way than surreptitiously and through sources that are vile. If every mother at an early age of her boy—say eight or nine—would tell him in a plain and loving way of his origin in her own body, and would pledge him to be loyal and true to her for what she has done for him, it would be an excellent opening chapter in sex knowledge; then, at twelve or thirteen, the father should tell the boy of the nature of the change in his life which is about to take place and of the dangers and abuses which he should avoid. The same service should be performed by the mother for her daughter, counsellng her, above all things and for the sake of the one who bore her, to keep her life beautiful. The diseases of sex can best be taught by the physician through the school. Sex hygiene and morals should be included as a part of every serious scheme of education. Special efforts should be made at puberty to transmute the instinct of loyalty and chivalry into useful and uplifting forms. It is especially at this period that the boy loves to bully and shine and do daring deeds. This is also the high tide of conceit. Boys should be taught chivalry to their sisters, and deference and respect and delicacy toward all mankind. Every boy should be taught the Golden Rule of Sex: *Act toward every girl as you would wish other boys to act toward your own sister.*

We have so long treated the subject of sex in

a furtive and clandestine way that it is difficult for even the most emancipated of us to compare judgments on it as we are accustomed to do on all other matters of human welfare. I believe, though, that the ignorance, reproach, and mystery that have so long hung over this subject should be swept away. The sex impulse exists. It came to us from the far past. It will always exist. It is necessary to the maintenance of the race. It is a human interest. It will always take a prominent part in the affairs of this world. It deserves to. Out of it arise some of the most central and priceless facts of human life—love, beauty, art, romance, and poetry. There is nothing essentially evil about this impulse, as men in many times have supposed. It is evil only in its perversions. In its present form it is somewhat of a nuisance, because it is attuned to conditions very different from those which it is called upon to serve to-day. It should be utilitarianized. It should be treated in the same frank and business-like way as any other human interest.

The sex problem is a great problem. It should never be solved on the basis of personal convenience. No solution of anything is final unless it is made in the interests of the universe. Every one who has in his soul divinity enough to long for a better world should include this great problem in the repertoire of his anxieties.

Civilization (what there is of it) is a rather recent and more or less artificial thing which men are seeking to superimpose on a base of

barbarism and animality. It is a system of feeling and acting and being related which is opposed to some of the oldest and most powerful impulses of human nature. Civilisation is not an appeal to nature. It is a revolt against nature—against nature as it has been represented in man in the past. It is supernatural. Civilization is an attempt to subordinate and control those primitive impulses which have reigned in human nature in the less gracious and less rational times gone by—impulses which we have ourselves to-day to a considerable extent inherited.

In a sense—in the truest sense, indeed—everything that exists is natural. And in this sense civilization is as natural as savagery—only there is not so much of it in the world, *as yet*. It is just as natural to be kind, and just, and altruistic as it is to be cruel, tyrannical, and selfish. But kindness, justice, and altruism are not so common as their negatives, *as yet*. The task that is before us is to make them so—to make them more so, indeed—to make cruelty, selfishness, and tyranny historical, and to make sympathy, reason, love, peace, altruism, and co-operation the reigning facts of our world.

16. REFORMING THE CURRICULUM

It has been said that our course of study is full now, that teachers are teaching all they can possibly teach already, and that there is no room for ethics.

But there is one thing that can always be done when we are confronted with the necessity of putting something more into a place that is already full, which we might try in the case of our too-full curriculum: we can turn the thing up-side-down and let a little of what is inside run out. The curriculum as it exists to-day is largely water anyway. Not over a third of it is indispensable. What does the study of all the wars amount to, and the finding of the value of so many unknown quantities, and the agony over obsolete languages and abstractions? Even if they are better than nothing, we certainly have the ingenuity to find something more useful to take their place.

The curriculum is a device. It has a certain function to perform. It is not sacred. It should be changed to suit the changing conditions of human life. Maybe we know more about what education is for and what it should consist of than our ancestors did, who were so long on piety that they wouldn't let their children whistle on Sunday, and so short on sense that they were afraid to go past a graveyard at night for fear of being "run in" by ghosts.

Illinois is the fourteenth state to legislate on the subject of ethics in the schools. The Illinois law provides that thirty minutes each week shall be devoted to moral and humane instruction. To those who do not understand its importance, this seems a large amount of time to give to this subject. But it is, in reality, a pitifully small amount to give to so important a matter.

Considering the vast stretches of time that are at present wasted on sterile and profitless subjects—subjects that are in the curriculum, not because they are useful but merely because they have been handed to us from the past—thirty minutes a week, six minutes a day, one-fiftieth of school time, is absurdly insufficient to teach the science and art of correct conduct. Thirty minutes a day would be more in keeping with the importance of the subject; and fifty minutes a day is not too much. A hundred years from now, when ethical culture has won a permanent place in our educational programs, and has books and outlines and teaching experience and habit behind it, men will look back on our blindness on this subject to-day with something like amazement. Look at our civilization. See what an insignificant fraction of reality there is in it. See the crime, poverty, corruption, cruelty, insincerity, and greed that riot on every hand. Then think of men drawing salaries as educators who understand so feebly the function of education that they object to giving even six minutes a day to the science of civilising people.

The effects produced by ethical teaching will be commensurate with the quality and quantity of the efforts put forth. It is useless to expect to get something for nothing in dealing with the perversities of human nature. If small results are aimed at, small and desultory efforts will bring them about. But if the race is to be regenerated, then a regular campaign will be necessary. Even casual lessons produce effects in fertile soil. Everything

grows in loam. But the human soul in its present stage of evolution is a rather stony thing, and requires careful tillage to produce crops of any kind. What is being done in the ethical culture line, even in states having legal provision for it in the schools, is only a beginning of what should be done and of what will be done when we get far enough to realize what ought to be done.

We are in the protoplasmic stage of ethical practice and understanding, and, hence, in the preprotoplasmic stage of ethical exposition. When we really set to work to redeem the world by getting men to feel and think and act right through the school, we shall provide ourselves with knowledge and enthusiasm, and texts and courses of study, and methods of teaching the subject and the co-operation of parents and the community. We shall go at it as we would a siege. We shall assign lessons, and have recitations and discussions, and investigate and make experiments, and give grades and credits, and use all the other aids to excellence that we find helpful elsewhere in education. Minds will arise to provide and inaugurate all of these things, just as they have arisen, prophet-like, in the past to meet the emergencies that have arisen from time to time in the march of progress.

If we teachers of to-day had lived a couple of generations to leeward, we could have had this whole subject of ethical culture cut and dried for us. But we ought to be glad that we live at a time in educational evolution when we can take part in bringing about this new and important

but hitherto overlooked phase of education. We ought to be not only willing but desirous to do our part. Pioneering is not pleasant. But it is necessary.

Civilization is a stocking. Each generation knits a little and passes it on to the next. We are able to make progress only as each generation adds something to what has already been done. Men who accept the benefits of the past without adding anything to them are parasites. We are the heirs of all the ages as well as the victims of all past tinkerings. If men had not been willing to blaze ways in the past, we would still be planting our potatoes in the moon and eating our grandfathers and grandmothers in the jungle. People who are without the impulse to do their part in the world's work should have had the enterprise to postpone their existence till the Millennium.

It has been my lot several times in years gone by to be called upon to teach subjects which I was neither accustomed nor prepared to teach. And I have never yet been required to make a shift of this kind without feeling at the time almost ruined. I never came nearer committing suicide in my life, I think, and certainly never shed sincerer tears, than I did once when I was called upon to take a class in book-keeping—a subject utterly foreign to my tastes and one for which I was so poorly prepared that I did not know a day-book from a ledger.

But I have never yet taken up the teaching of a new subject but I have been glad of it in the

end. For it has caused me to enter worlds which I had hitherto known but vaguely and which I never should have entered and known at all if I had not been pushed into them. The most perfect fossils I have ever met in the flesh, I think, have been those men and women who have been teaching the same thing without change or variation from time immemorial. They seem as dry and inanimate and as hopelessly impervious to all new ideas as smoked herring.

I do not advocate the direct method of teaching ethics to the exclusion of the indirect method. The subject should be taught both directly and indirectly—directly, as a separate and distinct line of knowledge and culture, and indirectly, in connection with such subjects as history, civics, literature, nature study, and hygiene. Ethics is a science. It includes a vast mass of information of the utmost importance to young people which is not found elsewhere in the curriculum. Direct teaching will ultimately mean departmental teaching. Morality should by all means have the service of experts. If Ethics is taught directly, *it will be taught*. If there is one thing that ought to be plain to everybody by this time, it is the fact that if moral instruction is left to the teachers of other subjects it will not be taught at all, except by the very occasional teacher.

Ethical culture is a new subject in the schools. It is inconvenient. Everything that is new is inconvenient. We are such unspontaneous creatures that the only things we can do easily

and really luxuriate in are the things which we have done over and over so often that we can do them in our sleep. After the first shock of inconvenience is past the teaching of ethical culture will afford satisfactions that were wholly unanticipated. It is a luxury that teachers don't always enjoy to feel that they are teaching something that is unquestionably worth while.

From being entirely overlooked for so long, it is easy to see that ethics may come in time to be regarded as the most vital and important part of education. And I believe firmly myself that this will be the case. When a new being comes into the world, the first and foremost thing to teach that new being is not to teach him to read and write, or cipher, or draw, but to teach him that there are other beings in the world besides himself, that these other beings are similar to himself, and that he should treat these other beings with the same care and consideration as he would if they were a part of himself.

17. THE WORLD TO BE

There is a doctrine called Anthropocentrism. It means the man-centre theory. According to this theory, man is the centre of the universe, and about the only thing in the universe of any consequence. It is a theory which was originated

by man. The earth and all it contains and everything outside of the earth—the sun, moon, and stars and all they contain—were, according to this theory, made for man. The non-human inhabitants of the earth were assumed to be mere adjuncts of the supreme species. They had been admitted into existence by an entirely different gate from man, and a much less glorious one.

According to the anthropocentric account of things, man had been a little unfortunate in the beginning, because of a certain weakness which he had for doing things he was told not to do, and he had been compelled to bump the bumps as a consequence. But through his veins still poured the purple blood of Olympus, and he fully expected in time to come to glitter again among the gods.

The earth has been headquarters for bigots from time immemorial. I suspect that if we had information from the stars and were able to judge the spheres of space comparatively, we would find that the earth is head and shoulders above every other world within the sweep of the telescope in the enormous output of its assurance. But this doctrine of anthropocentrism is an amazing production even for specialists.

This theory originated far back in primitive times, before modesty and generosity were ever dreamed of. It antedates real knowledge by two or three thousand years. It is a tribute of admiration from man to himself—a fine large bouquet which man says he got from the Creator as a compliment to his godlike appearance, but

which we know now is a fraud pure and simple. The fact that this theory originated among the very beings who were the chief beneficiaries of the theory is enough in itself to cast suspicion on its authenticity.

The doctrine of anthropocentrism has now vanished from intelligent minds, and is in the act of vanishing from unintelligent minds. It is destined to continue to fade until there is not a particle of it left. It is rank imposture. It is too silly and childish even for simpletons. Man is not a being apart. He is not a favorite of the gods, nor the subject of celestial anxiety. Nothing revolves about him or exists for him. Like all the other inhabitants of this world, he is a mere by-product of the play of cosmic forces —forces which grind on without eyes, without anxiety, and without end.

It almost seems sometimes that the Doctrine of Evolution has rendered all previous thinking obsolete. It has certainly had this effect on most thinking. The other day I heard a professor of history say that no history of Rome written thirty or more years ago was worth reading. The discoveries of the last three decades have thrown so much light on things that the older records have been rendered untrustworthy and false. It is almost as if the history of ancient Italy had never been written till our time. A similarly invalidating effect has been produced on human thinking in general by the discovery of evolution. Books written over fifty years ago seem obsolete to-day. And when we have had fifty years more

of evolution and really understand it, pre-Darwinian literature will seem still more archaic than it does now?

The discovery of new ideas in history or science has the same antiquating effect on existing ideas as the discovery of the steam engine or the electric motor or any other device has in the mechanical and industrial worlds. There is one important difference in the spirit manifested in the two fields of human endeavour. While the mechanical and industrial improvements are hailed as blessings by all classes of people, there are always a lot of people in the intellectual world who imagine they are serving their highest purpose in life by hanging on to the old discarded ideas (the intellectual reap-hooks and stick-plows of the race) and in doing what they can to induce everybody else to manifest the same degree of stupidity as themselves.

The Doctrine of Evolution is the greatest discovery ever made by the human mind. We are in the act of understanding it now, and hence are not able to appraise it at its true value. But when time has passed and we are able to look upon it historically and to realize its full significance, it will be recognized as being incomparably more epoch-making even than the prodigious contributions of Newton and Copernicus. It is more than a theory. It is a new point of view. It has necessitated an entirely new revaluation of everything in the universe.

In this Grand Revaluation man has both lost and gained. But the gain is immeasurably

greater than the loss—although to some the loss at this time seems irretrievable. Man *has* lost his throne. There is no doubt about that. But since we have learned that this was nothing but a *papier mache* affair presented to us by our naked ancestors, this loss does not seem so serious after all.

Man has not been demoted by Evolution, merely disillusioned. He has lost nothing but his wind-bags. Man is no different to-day from what he was before Darwin, except in the amount of his information, which has been incalculably increased. He is just as good-looking now, since he has found out that he is a replica of the ape, as he was when he erroneously supposed that he was the image of a god—at any rate, he has precisely the same image in both cases. In return for his throne, man has gained something that will in the end be of inestimably greater value to him than a thousand thrones, and that is a true understanding of himself.

Man's prospects are to-day brighter than they have ever been at any time in the world's history. He has the best and most influential position on the planet. He is at last rid of those fool ideas of himself, which have always been a stumbling-block to his advancement. Before him lies a Career far nobler than any that was possible under the legendary conception—that of Leader, School-master, and Father of all earth's myriads. Man need not any longer be haunted by the thought that he has been an unprofitable investment from the beginning. He has defects. But

he knows just what his defects are and where they came from. He knows, moreover, just how to set to work to correct them. The same revelation which disclosed to man his true nature and place in the universe has also disclosed to him just how he may go about it to glorify himself.

We live in a world that is neither petrified nor perfect. Even the "eternal hills" are changing, and the "fixed stars" are drifting among the spaces. Everything has been evolved, even our methods of forming conclusions. The universe is going somewhere. It is our duty to put ourselves in harmony with the universal urge for change and improvement. The conservative is a stake standing stupidly in a stream whose nature it is to flow on for ever. Men who are satisfied with the world as it is are either selfish or inferior.

Progress is a clock. We are not able to see the hands move, but we can see that there has been movement by looking at different times and places. Many wrongs which were once common and legitimate have already ceased to be. And many others which used to be practised openly and by everybody are now apologized for and confined to the more primitive members of society. See the tendency among the ultra-rich to make amends for their gluttony by eleventh-hour disgorgements to colleges and public libraries. Even Roosevelt feels the necessity of exercising his instinct to kill under the guise of "science." A Roman could take the lives of his slaves with the same impunity that we to-day kill cows. We used to think that negroes did

not have souls, just as we now think about horses and dogs. And it is a historic fact that certain peoples of the past hunted other peoples in four-horse chariots in the same savage and unfeeling way that we to-day hunt birds and elephants. In 1180 B.C. there was an uprising at Athens against the Aristocrats. The common people demanded the privilege of being initiated into the Eleusinian mysteries. The common people were excluded from these rites on the theory maintained by the Aristocrats that working people did not have souls.

The next hundred years will witness the greatest improvement in moral practice and understanding this world has ever seen. Nothing to compare with it has ever taken place in the evolution of ethics. The twentieth century is going to be a humanitarian century. The twenty-first century will dawn on a very different condition of things from that which we see around us to-day. Men are going to be *Brothers*, as certainly as the stars rise in the east. The marching and counter-marching going on in the industrial world to-day will end in a new order of society based on Mutualism, in which there will be not only division of labour but division of the products of labour as well. And along with the recognition of human brotherhood will come, is bound to come, the corollary recognition of the brotherhood of all those that feel.

I look along the ages. I see peoples rise and fall and rise and fall through the long, slow-heaving centuries to come; I see also, finally,

peoples rise who do not fall. They lay hold on the secrets of longevity. They add achievement and glory to achievement and glory, but die not. They approximate gods. They are the Race Immortal, the exponents of that Divine Civilization for which the eyes of Poets and Prophets have always longed.

We, who live to-day, who rob and eat each other and are so bold and pitiless about it, are, in that distant time, dust, as we deserve to be. We have played our little parts. We have dreamed our little dreams, and had our little day. But we have made a speciality of the wrong things. We have closed our eyes to the poor. We have not pitied. We have not loved. We have not universalized. We have bowed down to bloody altars. We have made wrong respectable. We have stoned and ignored the Prophets. And we have paid the penalty. *We have passed away.*

More than anything else, I think of the Future of this world. By twilight waters in the dying day, often I sit long hours at a time, dreaming of the World To Be. I think of the ages and ages and ages and ages that are to come and go on this earth, and of the vast changes that will be wrought by them. I think of the time when we of this generation shall have passed away and been forgotten in the riot and displacement of the everlasting years, and only the antiquarian delving in the musty tomes of antiquity will even know that we ever existed.

Sometimes, in our littleness, we boast of the

progress we have made, and of the knowledge, culture, and art which we as a race to-day display. But, O, it is the vanity of Adolescence. What will the knowledge, culture, and art of to-day amount to fifty or a hundred thousand years from now?—or a million years from now? Nothing! This sphere, with its clinging tenantry, will still be here then and will still be making its annual journeys round the sun, as now. But, O, what mighty and ineffable changes! The things of to-day will be so rude and childish and so far away that they will not even be considered.

O the shining and incomparable Career that lies before us as a Race, and which no one understands or dreams of to-day! O Great, Gifted, and Divine Future, I pray you pity these poor, miserable, ungifted generations of heathens!

We should be more eager to move along—more eager to escape the everlasting disgrace that hangs over our time. No one is so little entitled to space as the Infant who stands lisping that “this is the best of all possible worlds.” Without eyes and soul and understanding is he who sees no wrong in this mal-wrought world of ours.

Out of the years of the past comes a message from one who towered among us a generation ago—a message voicing in all its fervency the prayer and hope of Humanity: “Young man, young woman, join yourself in your youth with some unpopular cause and grow up loyal in its service.”

This is a wintry world. Low temperatures prevail in the hearts of men. Altruism is scarce. Gaunt but blessed hands stretch up to us everywhere for bread. They are the holy hands of Truth.

Let us be alive. Let us be liquid. Let us be Young. The Old atrophy, because they cease to flow. Let us be loyal for ever to those heavenly banners that flutter everywhere in the airs of this age—the banners of those who strive for a Better World.

18. A COURSE IN ETHICAL CULTURE

Following is an outline of a course of study in ethical culture for elementary and high schools. It may be a little too idealistic for adoption *in toto* in the present raw state of human understanding. It will be noted that some of the topics suggested for the elementary school appear also among the topics for the high school. It is intended that these topics shall be treated briefly in the elementary grades and more fully in the high school. Some of the topics in the VII. and VIII. grades are too difficult for more than elementary treatment. But there is much advantage in having a subject brought to the attention casually and in general outline before it is presented in full. Then, too, the great mass of human beings get what education they get in the elementary school, and for this reason topics are included in the elementary school outline that would logically be postponed till the high school.

ELEMENTARY SCHOOL.

Grades I. and II.

Fair play in games. Returning found articles. Doing for others. Helping one another. Helping at home. Making others happy—father, mother, brothers, sisters, mates, pets, domestic animals, birds. What we can do to make each

happy. Courtesy and good manners. Other ways of showing thoughtfulness of others. Putting one's self in the place of others. Stories of the childhood of Washington and Lincoln, Elizabeth Fry and Florence Nightingale. Story of Philemon and Baucis. Maxims.

Care and treatment of pets: birds, squirrels, cats, dogs, rabbits, fishes, etc. Importance of food, fresh air, exercise, and companions. The sufferings and enjoyments of pets. Putting oneself in the place of pets. The cruelty of caging wild birds, squirrels, and other active animals. To cage a bird is to put it in prison for life. No animal should be kept captive unless it can be made reasonably happy. We should treat other animals as we ourselves would wish to be treated. We would not like to be put into a box six feet square and kept there away from all companions as long as we live.

The name, colour, appearance, and song-notes of ten common birds. Usefulness of birds as seed and insect destroyers. The migration of birds. The hibernation of frogs, snakes, turtles, crayfishes, etc. Feeding birds in winter. The providence of squirrels. "Balancing" the aquarium.

The homes and home-life of animals. Stories about animals. Songs. Impersonating animals.

The aim should be to lay here in these plastic years a real foundation for altruism in the feelings and habits.

Grades III. and IV.

Duties to teachers and mates. Punctuality,

orderliness, courtesy, kindness, honesty, obedience, industry. Sincerity in work and play. The daily program of work, sleep, and recreation. Proprieties and improprieties of the class-room. Honesty in school work. Moral courage. Reporting thefts. Cheating. The practice of protecting (and so encouraging) school-room criminals by silence. Any one knowing of wrong-doing and failing to expose it encourages it to exist and is in part responsible for it. The sense of responsibility. Self-control. "All our sins sooner or later come home to roost."

The rules of the school. Take up the various rules of the school and show why they are necessary and explain the logic and reasonableness of the penalties for violation. School-rules are analogous to laws in a city or state. They are necessary regulations. Those who observe them are law-abiding. Those who break them are criminals.

Care of school-house and grounds. Planting trees, vines, and flowers. Throwing papers and other waste on the streets, and in the school halls. *Somebody* has got to pick up everything that is thrown away. We should not expect somebody to go around and clean after us all the time. The child tendency to persecute strangers, foreigners, old people, and smaller children. Courtesy and helpfulness much better than unkindness. "Put yourself in the place of others." "Act towards others as you would have others act towards you." Calling names, snow-balling.

Choosing associates. Influence of mates. Bad

company. "A man is known by the company he keeps." "Birds of a feather flock together." Manliness and womanliness under all circumstances. The importance of a strong and abiding determination to do right under all circumstances, regardless of how others do.

Respect and refinement between the sexes. Importance of a clean body and a clean mind. "The mind is coloured by the thoughts it thinks."

Domesticated animals. Meaning of *domesticated* and *wild*. Care and treatment. Importance of regular and natural food, of freedom and exercise, of fresh air and companions. The hot-house life deadly to birds, monkeys, and other animals, as well as to man (*see Hagenbeck* on allowing animals out of doors winter and summer). Most of the happiness and misery of domestic animals comes from our hands. We are their gods. What the various domestic animals do for us, and what we should do in return. Put yourself in the place of others—*always*. Stories and incidents illustrating the character, habits, intelligence, and daily life of the dog, cat, pig, sheep, goat, domestic fowls, cattle, donkey, camel, elephant, reindeer, goldfish, honey-bee (*see Romanes*). Let the children tell stories of their own experience with these animals and stories they have heard.

The dog—its devotion, intelligence, and usefulness to man. High character of the collies and St. Bernards. Stories of dogs. (Let the children tell some.) Stories of brave dogs (*see Carter*). Kindness to lost dogs and stray cats. The dog-pound.

The horse—its strength, beauty, patience, and usefulness to man. Its wrongs and sufferings: over-loading, over-working, the lash, check-reins, docking, long hours, loss of sleep, poor homes. Laws regarding these things. Reporting cruelties to humane societies and other officers of the law. Holidays and vacations for horses. Work-horse parades. Homes and pastures for the sick and old. The horse should be treated as an *associate and friend, not as a machine.*

The selfishness and unbeauty of regarding other animals merely as *means to human ends*. The benefits of the association should be mutual.

The sufferings of cattle on trains and on the plains in winter (*see Whitehead*). The slaughterhouse. Poultry in transit.

Animal cemeteries. Educating animals (*see Hagenbeck*). The loneliness of the solitary pig in a pen.

The study of ten birds in addition to those of 1st and 2nd grades.

Name, location, and work of local humane society. How to help the society.

Review more or less in each grade the work of previous grades. This should be done throughout the course.

Grades V. and VI.

Duties to parents, brothers, and sisters. Gratitude and obedience to parents. A boy's heart shown by his respect and love for his mother. "All I am and all I hope to be I owe to my angel mother."—*Lincoln*. Filial piety of the Chinese. Doing one's part in making home happy and

beautiful. The bane of selfishness and irritability in the home. Marks of manliness and good-breeding. Chivalry of boys to their sisters. Courtesy and respect by boys and girls for each other. Purity and refinement and honesty in the social relations of the sexes. *A boy should treat every girl as he would have another boy treat his own sister.* This is the Golden Rule of Sex. Friendships are among the most beautiful things in this world. They should be kept unsullied.

Meaning of *right* and *wrong*, *good* and *bad*, *moral* and *immoral*.

Moral qualities: kindness, courtesy, mercy, humanity, honesty, truthfulness, justice, love, sympathy, helpfulness, patience, forgiveness, courage, firmness, self-reliance, charity, cheerfulness, optimism, etc. Usefulness of these things in the home, school, business, and society. Stories and incidents illustrating these qualities.

Immoral qualities: unkindness, cruelty, lying, dishonesty, cowardliness, revenge, hatred, rudeness, lack of consideration for others. The impossibility of successful association of any kind where these qualities are general. Stories and incidents. Let the boys and girls tell them.

Street manners. Courtesy to strangers. "Life is not so short but there is always time for courtesy."—Emerson. The "smart Aleck" and the cad. Public parks and how to use them. Public spirit.

Maxims and proverbs. Write sayings on the board and have pupils discuss their meaning and admirableness.

Wild animals. "Wild animals" merely strangers to us—beings who live apart from and independent of us. They suffer and enjoy the same as we do. They have their own ends and justifications of life. Other animals *not* "made for man." City and state laws against cruelty to wild animals. Visits to local zoo. Compare the condition of captive animals with the condition of those in wild life. Tell of Hagenbeck and his work at Stellingen (*see* "Beasts and Men," by Hagenbeck). The training of wild animals.

Moral and immoral qualities among non-human animals. Forgiveness and devotion in the dog. Sympathy and curiosity in the monkey. Revenge in the elephant. Cunning in the fox and wolverine. Philanthropy in the St. Bernards. Mother love among men and other animals. Co-operation and mutual aid among animals (*see* Kropotkin). The high social development of the bees, wasps, and ants. Harmful and harmless wild animals. Killing with pity and with the least pain the "criminal races" of the world.

Birds—their beauty, habits, songs, and nests. Kindness and hospitality to birds. Encouraging birds to live about our homes. Food boxes and nesting boxes. How to know the birds. Bird books. Economic importance of birds. We should plant a few trees for the birds when we plant our orchards. Decrease in bird life (*see* Hornaday, p. 171). Robbing nests. Sling-shots. Laws against the killing and caging of birds. Bird millinery. Bird sanctuaries (*see* Chapman, "Camps and Cruises").

Study ten new birds, and begin classification. Meaning of order, family, genus, and species. Examples.

Squirrels—in parks and about our homes. The gray squirrel better than the red. The latter eats birds' eggs.

Rabbits, mice, butterflies, fishes, frogs, and turtles—the wrong of causing unnecessary suffering and death to these beings. Cruelty of the steel-trap and other devices that mutilate the prisoner. Use traps that merely apprehend without mutilation. Stoning birds and frogs.

The menagerie, a cruel and anachronistic institution. The loneliness and anguish of life-long imprisonment.

"Insect collecting"—to be discouraged.

Grades VII. and VIII.

Citizenship, good and bad. Duties and obligations to city and state. Character qualifications for good citizenship; honesty, courage, intelligence, public spirit. Independence in politics. Statesmen *v.* politicians. The moral courage of minorities. The intelligent, upright citizen is the hope and glory of a republic. Initiative, Referendum, and Recall. Child Labor. Labor and Capital. The saloon. Unionism. Socialism. Single Tax. Suffrage.

The ethics of business life. Honesty as an asset in business. Betting and gambling. Debts.

Treatment of Criminals. Prison reform. Criminals are defectives, born so, and should not be treated in a spirit of vengeance. They should

be pitied. Most so-called "crime" is only the survival of instincts, more or less useful and right in primitive times, but out of place in present conditions. Much "criminality" due to wrong social and industrial conditions. Treatment of the old and the sub-normal. Schools and asylums for blind and deaf. Juvenile and probation courts.

War and Peace. War, the normal state of most primitive peoples. "Mountains interposed, and made enemies of nations who had else, like kindred drops, been mingled into one."—*Cowper*. Peace the ultimate state of human society.

"The war-drums throb no longer,
And the battle-flags are furled
In the Parliament of Man,
The Federation of the World."—*Tennyson*.

The cost of wars in money, energy, suffering and lives. A battle is a method of settling disputes similar to the duel. The duel has passed away, and the battle will also pass away. Standing armies and navies. The cost of armed peace (*see Kirkpatrick*).

Disarmament. Arbitration. The Hague Tribunal. Peace societies—what they are trying to do, their literature, and headquarters. The spirit of internationalism as shown by treaties and all sorts of international organizations. Red Cross societies. Biographies of great men of peaceful achievement: Darwin, Lincoln, Edison, Queen Victoria, Florence Nightingale, Tolstoy. "The world is my country and to do good is my religion."—*Paine*.

The history and evolution of morals. Illustrations from savage, barbarous, semi-civilized, and élite stages of mankind (*see Lubbock*). Evolution of political, religious, social, and family morality. Why different peoples have different moral systems to-day. Slavery, bull-fights. Gladiatorial games. Prize fights. Cock fighting. The morals of the future. Let the boys and girls suggest improvements in the various existing relations of men.

Meaning of Egoism and Altruism. The preponderance of Egoism in human nature. Examples. The weakness and scarcity of Altruism. Need of emphasis. Balanced Egoism and Altruism the ideal. Human nature not always nor everywhere the same. Savage and civilized peoples. The Future.

Self-culture. Habits—how formed and broken (*see James*). Read “The Chambered Nautilus,” by Holmes.

Maxims and proverbs.

Hunting, fishing, and trapping. The savagery of “blood sports.” The wanton destruction of the buffalo, seal, antelope, deer, mouse, wild pigeon, egret, etc. (*see Hornaday*). The savage origin of hunting and fishing. Plume hunting. “Hunting” with camera and opera-glass as civilized substitutes for savage pastimes (*see Chapman*). Audubon societies. Life of John James Audubon (*see Burroughs*). Pigeon shooting. Humane societies. Anti-vivisection societies. How to help and co-operate with these societies.

Reporting cases of cruelty, short weight, violations of public health laws, etc., by students. Scouting in the interests of law, order, and humanity would be an excellent apprenticeship for young citizens. Humanitarianism (*see* Salt). Vegetarianism. Our duty as the most intelligent animal with power over other animals. The economics of kindness to animals. Federal bureau of animal industry.

The rights of non-human animals (*see* Salt). Laws for the protection of domestic and wild animals. Insufficiency of such laws. Most crimes are legal. New laws that are needed. (Let the students suggest them and discuss them pro and con with each other, directed by the teacher). "Game" laws. The generally unprotected condition of wild animals.

The evolution and unity of life. The universal kinship. The ethical implications of evolution. Moral obligation is as shoreless as *feeling*. Humanitarians of history: Plutarch, Pythagoras, Seneca, Shelley, Schopenhauer, Howard, Cowper, Tolstoy (*see* Williams).

The source of ivory, chamois, seal-skin, leather, aigrettes, Persian lamb, furs, pearl buttons, sirloin, silk, pâté de foie gras, sponges, pearls.

Vegetal ivory, vegetal silk, vegetal leather, vegetal furs, vegetal sponges.

Study of ten new birds. Some of the orders and families of birds.

THE HIGH SCHOOL

First Year.

1. Meaning of Ethics.
2. Origin of Domesticated Animals.
3. Vestigial Organs.
4. Vestigial Instincts.
5. Savage Origin of Civilized Peoples.
6. Savage Survivals in Civilized Peoples.
7. Ethics of School Life.
8. Habits (*see* James and White).
9. Traits of the Ideal Character (*see* White).
10. Kindness and Courtesy (*see* White and Everett).
11. Reproduction in Plants.
12. Classes of Animals.
13. Reproduction in Lower Animals.
14. Reproduction in Mammals.
15. Human Reproduction.
16. Sex Hygiene.
17. The Rights of Women. A comparison of ideas by the Class. *Not a debate but an exploration.*
18. Getting an Education. Including the Educated Life, Education as an Investment, and Compulsory Education.
19. The Care and Treatment of Pets (*see* Saunders).
20. The Nature and Use of Tobacco.

Second Year.

1. The Emotions of a Young Red Partridge (Daudet).
2. Dogs and Men (*see* Merwin).

3. Obedience (*see* White and Everett).
4. The Biogenetic Law (physical).
5. The Biogenetic Law (mental).
6. Standards of Right and Wrong.
Especially Utilitarianism.
7. Honesty and Truthfulness (*see* White).
8. The Ethics of Health.
9. Silent Martyrs of Civilization (*see* Moore, 67).
10. Character and Habits of Birds.
11. Economical Importance of Birds.
Illustrated with Conrad's Slides.
12. Audubon Societies.
13. The Story of Redruff (*see* Seton, 98).
14. War and Peace.
A Comparison of Ideas by the Class.
15. The Cost of a Skin (*see* Moore, 67).
16. Self-Control (*see* White).
17. Self-Reliance (*see* White).
18. Source of Seal-skin, Ivory, Chamois, Pearls,
Aigrettes, Persian Lamb, Sponges, Silk,
Pâté de foie gras.
19. The Ethics of Home Life.
20. Life and Teachings (ethical) of Jesus.

Third Year.

1. Human and Non-Human Mind.
2. Instinct and Reason.
3. War : Standing Armies and Navies, Savage
Origin of War, Moral and Pecuniary
Evils.
4. Peace : Peace Societies, Red Cross Society,
The Hague Tribunal, Internationalism.
5. Courage and Heroism (*see* White).

16. The Evolution of Mind.
7. Unselfishness (*see* White).
8. Rights of Non-Human Animals (*see* Salt).
 A Comparison of Ideas by the Class.
9. Hunting with a Camera (*see* Chapman).
 Illustrated with Conrad's Slides.
10. The Treatment of Criminals.
 Prisons, Scaffolds, Juvenile and Probation Courts, Parental Schools.
11. The Treatment of Defectives.
 Asylums for Blind, Insane, Epileptic, and Old. Schools for Deaf and Dumb, Crip- ples, and Consumptives. Hospitals.
12. The Ethics of Business Life.
 Including Betting, Gambling, and Debts.
13. The Ethics of Citizenship.
14. Nature and Use of Stimulants.
15. Humane Societies.
16. Mutual Aid among Non-human Animals
(*see* Kropotkin).
17. Mutualism Among Men.
18. Sympathy (*see* White).
19. Honesty as an Asset in Life (*see* Sharp).
20. Life and Teachings (ethical) of Buddha.

Fourth Year.

1. The Story of Silverspot (*see* Seton, 98).
2. Ideals.
3. Egoism and Altruism.
 Including Nature and Origin, The Pre-ponderance of Egoism, The Scarcity of Altruism, and the ideal relation of the two.

4. Laws: Natural and Human, Governmental and Moral, Initiative and Referendum.
5. Some Moral Laws: The Golden Rule, The Law of the Larger Self, Might Makes Right.
6. Causes of Immorality.
Including the Contents of Ethics.
7. Justice (*see* White).
8. Artificial and Natural Selection.
9. The Evolution of Morals.
10. The Geographic Distribution of Morals.
11. Rights of Labor and Capital.
A Comparison of Ideas by the Class.
12. Eugenics (*see* Galton).
13. Vegetarian Societies.
14. Social Justice (*see* Rauschenbusch).
15. The Ethics of Public Life.
16. Choosing a Vocation.
17. Perseverance and Determination (*see* White).
18. Ambition (*see* White).
19. Getting on in the World (*see* Matthews).
20. Men Who Win (*see* Faris and Thayer).

All of the general subjects mentioned in this course of study are treated in any first-class Encyclopædia. They may be looked up also by consulting the catalogues and subject-indexes of libraries. Public librarians are always glad to help any one in search of information on any particular subject.

19. BOOKS ON ETHICAL CULTURE

1. BABCOCK: *Bird Day and How to Prepare for it.*
2. BARTLETT: *Animals at Home.*
3. BATES: *Story-lessons on Character and Manners.*
4. BEEBE: *Two Bird-lovers in Mexico.*
5. BELL: *Animals' Friend Annual.*
Finely illustrated. Instructive and amusing articles for both children and grown-ups.
6. BLACHAN: *How to Attract the Birds.*
7. " *Bird Neighbours.*
8. BLOCH: *The Future of War.*
9. BREWER: *American Citizenship.*
Able and lofty in tone.
10. BRIGHTWEN: *Wild Animals Won by Kindness.*
Twenty-eight true stories of the power of kindness, and a chapter on "How to Study Nature." For the Elementary School.
11. BRYANT: *How to Tell Stories to Children and Some Stories to Tell.*
12. BRYSON: *Tan and Teckle.*
A charming book for both old and young.
13. BUCKNER: *The Immortality of Animals.*
14. BURROUGHS: *Life of John James Audubon.*
15. CABOT: *Ethics for Children.*

16. CARTER: Stories of Brave Dogs.
17. CHAPMAN: Bird Life.
18. " Camps and Cruises of an Ornithologist.
19. " Bird Studies with a Camera.
Chapman is the premier of bird students.
20. CORNISH: Animals at Work and Play.
21. " Animals of To-day.
22. COUPIN: The Wonders of Animal Ingenuity.
23. DARROW: Resist Not Evil.
24. Dog Stories.
Published at 22, Regent Street, London,
S.W., England.
25. DUMAS: My Pets.
Stories of dogs, monkeys, parrots, etc.
26. EDDY: Friends and Helpers.
27. " Songs of Happy Life.
Songs with music.
28. ELIOT: Great Riches.
29. ELLIS: Character-forming in Schools.
30. EMERSON: The Conduct of Life.
31. EVANS: Evolutional Ethics.
32. EVERETT: Ethics for Young People.
This is a simple, condensed, and charming little book, treating all the various elements of human character.
33. FARIS: Winning Their Way.
34. FIRTH: Voices of the Speechless.
35. FORBUSH: The Boy Problem.
A Study in Social Pedagogy, with an introduction by G. Stanley Hall.
36. GALTON: The Foundation of Eugenics.
37. HAGENBECK: Beasts and Men.

38. HALL (G. STANLEY): Aspects of Child-life and Education.
39. HALL (H. R.): Days Before History.
Tales of Primitive Man. For Children.
40. HALLECK: Psychology and Psychic Culture.
41. HANLEY: Our Poor Relations.
A Brilliant Essay.
42. HORNADAY: American Natural History.
43. JAMES: Talks to Teachers.
Has a luminous chapter on "Habit."
44. JORDAN: The Blood of the Nation.
45. KAUTSKY: The Class Struggle.
46. KEITGES: Proverbs and Quotations.
47. KINGSLEY: Water Babies.
48. KIRKPATRICK: War—What For?
Brilliant and outspoken.
49. KROPOTKIN: Mutual Aid Among Animals.
Shows the important part played by altruism in the life of animals.
50. KRAUSE: A Manual of Moral and Humane Education.
A splendid book for the elementary school. Contains a graded course of study for each month of the school year, with excellent selections and suggestions in art, literature, and nature study.
51. LEFFINGWELL: The Vivisection Controversy.
Published by the London Anti-vivisection Society, 22, Regent Street, London.
52. LONG: Secrets of the Woods.
53. " Ways of Wood Folk.
54. " Wilderness Ways.
William J. Long has a fascinating pen. His

chief anxiety as a writer, however, is not to teach tenderness and humanity, but to charm his readers. The same thing may be said of Thompson-Seton and Charles G. D. Roberts.

55. LUBBOCK : The Origin of Civilization, and
The Primitive Condition of Man.
56. MACCUNN : The Making of Character.
57. MAETERLINCK : Our Friend the Dog.
58. MARTYN : The Life of Wendell Phillips.
59. MATTHEWS : Getting on in the World.
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61. MERWIN : Dogs and Men.
A very superior little book.
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65. " Our Home Pets: How to keep
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Olive Thorne Miller is always charming,
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67. " The New Ethics.
68. " Ethics and Education.
69. MORLEY : The Bee People.
70. OUIDA : A Dog of Flanders.
One of the finest things Ouida ever
wrote.
71. PAGE : Ethical Culture Readers (2 vols.).
Excellent for the Elementary Grades.
72. PIERSON : Among the Pond People.
73. PYLE : Stories of Humble Friends.
Twenty-two excellent stories.

74. RAUSCHENBUSCH: *The Social Crisis.*
75. ROBERTS: *Kindred of the Wild.*
76. " *Watchers of the Trails.*
77. " *Little People of the Sycamore.*
78. ROMANES: *Animal Intelligence.*
A mine of information on the memory, emotions, habits, and reasonings of animals, from bivalves to apes, by one of the greatest scientists England ever produced.
79. ROMANES: *Evolution of Mind in Animals.*
80. " *Evolution of Mind in Man.*
These two volumes are perhaps the most monumental works on comparative psychology in existence.
81. SALT: *Animals' Rights.*
One of the ablest presentations of the claims of humanitarianism ever written.
82. SALT: *The Logic of Vegetarianism.*
83. " *Kith and Kin.*
A collection of poems and quotations on humane subjects.
84. SAUNDERS: *Beautiful Joe.*
The autobiography of a dog.
85. " *Beautiful Joe's Paradise.*
A Sequel to *Beautiful Joe.*
86. " *My Pets.*
87. SCHOFIELD: *The Springs of Character.*
88. SCUDDER: *Life of a Butterfly.*
89. SADLER: *Moral Instruction and Training in Schools.*
A two-volume work giving an account of the work in moral education in the various countries of the world.

90. SEWELL: Black Beauty.
The autobiography of a horse.
91. SHALER: The Citizen.
92. " Domesticated Animals.
93. SHARP: A Course in Moral Education.
For the high school. Published by the University of Wisconsin.
94. SHARPE: The Golden Age Cook Book.
Tells how to live on a bloodless diet.
The best vegetarian cook book in existence.
95. SUCKLING: The Humane Educator and Reciter.
Dialogues, sketches, and selections for children's entertainments.
96. THAYER: Men Who Win.
97. THOMSON: The Science of Life.
Professor Thomson is the most delightful of living biologists.
98. THOMPSON-SETON: Wild Animals I Have Known.
99. " Lives of the Hunted.
100. " Boy Scouts in America.
101. " Animal Heroes.
102. THORNDYKE: Introductory Psychology.
103. TOLSTOY: Thou Shalt Not Kill.
104. TRINE: Every Living Creature.
105. VELVIN: Animal Celebrities.
106. WALSH: The Moral Damage of War.
107. WHITE (J. T.): Character Lessons.
This is an excellent book. It is adapted to almost any grade, elementary or high school. It was prepared for the

Character Development League of New York. It is the best book on character culture in existence.

108. WHITE: Animal Lovers' Birthday Book.
109. WHITEHEAD: Our Dumb Animals and How to Treat Them.

Used as a text in the Colorado public schools. Excellent for the elementary grades. Readings with questions and illustrations.

110. WILLIAMS: The Ethics of Diet.
111. WRIGHT: Four-footed Americans.
112. ZOLA: Why I Love my Dog.
113. BATES: Story Lessons on Morals and Manners.
114. COBAT: Ethics for Children.
By grades and months. For the elementary school. Good.
115. MUMFORD: The Dawn of Character.
116. BURT: Poems every Child should know.
117. JEWETT: Control of Body and Mind.
118. BALDWIN: An American Book of Golden Deeds.
119. GUEST: Animal Life Lessons.
120. WIGLEY: Little Lessons about Animals.
Any of the foregoing books may be obtained through any first-class book dealer. Most of them are obtainable in public libraries.

The Moral Education League, an International organization, with headquarters at 6, York Buildings, Adelphi, London, England, publishes (or supplies) a number of helpful books and pam-

phlets on Ethical Culture. The following are among them:—

CHESTERTON : *The Garden of Childhood.*

Thirty stories for little folks. Suitable for reading aloud, or for re-telling to children. For children of seven years.

CHESTERTON : *The Magic Garden.*

Twenty-eight stories teaching manners, humanness, justice, order, perseverance, truthfulness, and the like. For children of nine or ten years.

WALDEGRAVE : *A Teacher's Handbook of Moral Lessons.*

Chapters on manners, justice, thrift, work, etc.
For children of eleven or twelve years.

REID : *A Manual of Moral Instruction.*

A text-book covering all the grades of the elementary school, from seven to fourteen years.

GOULD : *Life and Manners.*

A volume of sixty stories on the subjects of self-control, kindness, truthfulness, character, etc.

GOULD : *Conduct Stories.*

Fifty-three chapters, with an introductory chapter on "The Art of Story Telling." For boys and girls from ten to fourteen years.

GOULD : *The Children's Book of Moral Lessons.*

Four small volumes of Moral Lessons. For the upper grades of the elementary school. There is a fifth volume containing "Stories for Moral Instruction."

HACKWOOD : *Lessons on Moral Subjects.*

Forty lessons. For the use of teachers only. The lessons are divided into parallel columns of Matter and Method. The themes include such

subjects as obedience, self-control, kindness, cleanliness, loyalty, and the like.

The American Humane Association, Albany, New York, publishes a large number of leaflets on humane subjects which may be obtained almost free by any one who will write for them.

"The Animals' Friend" is a beautiful monthly published by Mr. Ernest Bell, York House, Portugal St., London, England; 50 cents a year. The best periodical of its kind in the world. The Animals' Friend Society is an organization promoted by Mr. Bell in connection with his magazine. It publishes school pictures, cards, leaflets, etc., suitable for use in humane teaching.

"The Humanitarian," published at 53, Chancery Lane, London, is the monthly organ of the Humanitarian League of Great Britain. The Humanitarian League is the most able, dignified, and influential organization of its kind in existence. It publishes a number of leaflets, pamphlets, and books.

"Our Dumb Animals" is the organ of the Massachusetts Society for the Prevention of Cruelty to Animals. Published at Boston.

"The Advocate of Peace" is the organ of the American Peace Society. Boston: \$1.00 a year.

"Bird Lore" is the organ of the National Association of Audubon Societies, Harrisburg, Pennsylvania; \$1.00 a year.

"Our Animal Friends" is the organ of the American S.P.C.A. Published at New York.

The following list of selections from the reading books, supplementary readers, and

library books is appended to the Chicago public school course in Ethical Culture:—

First Grade.

BOSTON COLLECTION OF KINDERGARTEN STORIES: Wise Old Dobbin, The Hen Hawk, Hiawatha, Dick Whittington and His Cat, The Origin of the Woodpecker, The Street Musicians, The Pea Blossom, The Fairy Gift, The Three Gold Fishes.

FABLES AND STORIES: The Mouse and the Lion, The Dove and the Ant.

GRADED LITERATURE READERS, Book II.: The Voice in the Wood, Bessie and the Birds, The Way to Have a Good Game, A Kind Brother, A Kind Girl, In a Minute, Too Many Dolls, Piccola.

HAWTHORNE PRIMER: The Little Pine Tree.

HAWTHORNE FIRST READER: Learning to Work, Two Men Inside, Dick Smiley's Birthday, The Star Money.

HAWTHORNE SECOND READER: A Story of the Aster and the Goldenrod.

IN THE CHILD'S WORLD—POULSSON—How Patty Gave Thanks, Christmas in the Barn, How a Little Boy Got a New Shirt, How Frisk came Home, The West of Many Colors, The Farmer and the Birds, The Sleeping Apple.

LIGHTS TO LITERATURE, Book I.: King Midas, Philemon and Baucis, The Ant and the Grasshopper, Phœcüs.

MEMORY GEMS: Mary Chancellor.

NEW ERA SECOND READER: The Squirrel,
The Cruel Boy.

NEW CENTURY READER, BOOK II.: Story of
Max.

STEPPING STONES TO LITERATURE, BOOK I.:
The Farmer and His Sons.

STEPPING STONES TO LITERATURE, Book II.:
Hero, A Faithful Friend.

STORIES ABOUT ANIMALS: (Flanagan and Co.).

STORIES FROM THE POETS: Atwater.

Second Grade.

APPLETON'S SECOND READER: Jamie and
Bruno.

BALDWIN'S SECOND YEAR: Androclus and the
Lion, Fanny and the Chickens.

CHILD LIFE: SECOND READER: Little
Sunshine, Goody Two Shoes, The Ugly
Duckling, The Little Watch Girl, Queen
Bee.

CYR'S SECOND READER: Welly's Little Friend,
Helping Hands, Tim and the Pear, Walter's
Christmas Tree.

HARPER'S SECOND READER: How Edward
Dares, Frank and Nellie, Bessie and Her
Little Lamb, Which Was the Wiser, Prince,
Willie Grant, The Flower Bed's Secret,
Saved by a Lark, Bad Apples.

LIGHTS TO LITERATURE, BOOK II.: The Two
Wills, A True Story of Grandma, The
First Woodpecker, A Story of Gen. Custer
(Gr. IV.)

TAYLOR'S SECOND READER: I Didn't Think,
The Christmas Bells, A Daffodil Story.

Third Grade.

ANIMAL STORIES.

APPLETON'S THIRD READER: The New Skates, The Crippled Sparrow, The Hunted Fawn, The Sparrow in the Ball Ground, The Robin and the Snake, Faithful Fido.

BALDWIN'S THIRD YEAR: The Story of a Lost Lamb, A Brave Boy.

BIRD STORIES AND OTHER STORIES: A. L. Burt, Publisher.

BOSTON COLLECTION OF KINDERGARTEN STORIES: The Lost Lamb, The Surgeon Bird, The Pied Piper of Hamelin.

CYR'S THIRD READER: Kindness, Courage, Obedience, Honesty, Industry, Helpfulness, Patience.

GRADED LITERATURE READERS—BOOK III.: Benjy in Beastland, A Good Shot.

HAWTHORNE THIRD READER: The Ten Fairy Servants, Edward Able, Florence Nightingale.

LIGHTS TO LITERATURE, BOOK III.: A Kind Deed, The Dove and the Bee, Tilly's Christmas.

NEW ERA THIRD READER: The Duke and the Monkey, Stories of Lincoln, Helen Keller.

STEPPING STONES TO LITERATURE, BOOK III.: The Faithful Little Persian, The Stone in the Road, A Dog's Story.

THROUGH THE YEARS, BOOK II.: Anecdotes of Abraham Lincoln.

TWILIGHT STORIES.

WHEELER'S THIRD READER: The Fairy's Two Gifts, Grace Darling, A Bird and a Boy.

Fourth Grade.

ARROW AND THE SONG, THE: Longfellow.

BALDWIN'S FOURTH YEAR: Little Jean.

BLACK BEAUTY: Sewell.

BOY ON A FARM, A: Abbott.

DUCK ANIMALS—AND HOW TO TREAT THEM: Whitehead.

HAWTHORNE'S FOURTH READER: The other Side of War.

LIGHTS TO LITERATURE, Book IV.: The Leak in the Dike.

SOME USEFUL ANIMALS: Monteith.

SPRAGUE'S CLASSIC READER, Book IV.: Gen. Grant's Kindness to Horses, Trissey's Christmas Tree, The Return of Ulysses (Part I.), Paternal Love (Part II.), Honesty is the Best Policy (Part II.).

STORIES TO TELL TO CHILDREN: Bryant, The Castle of Fortune.

STORY OF ALI COGIA: (Arabian Nights).

Fifth Grade.

BEAUTIFUL JOE: Saunders.

BONNY PRINCE: Sewell.

COLLIERY JIM: Nora J. Finch.

DOG OF FLANDERS, THE: Louise de La Ramee.

DUKE: Sewell.

EPOCHS IN AMERICAN HISTORY: Edward S. Ellis.

GRADED LITERATURE READERS, BOOK V.: A
Farewell Appearance, Calet and Bertha,
Abou Ben Adhem.

HIAWATHA.

LIGHTS TO LITERATURE, BOOK V.: Patrasche,
The Kindly Jest.

LITTLE MEN: Alcott.

LIVES OF THE PRESIDENTS: Edward S. Ellis.

MISS TOOSEY'S MISSION: E. Whitaker.

ONLY A HORSE, OR TOM'S REFORM: Charlotte
McLeod.

OUR FRIENDS, THE BIRDS: Caroline Parker.

OUTDOOR SECRETS: Margaret F. Boyle.

PROVERBS AND QUOTATIONS: John Keitges.

QUOTATIONS AND SELECT STORIES: Bass.

STRIKE AT SHANE'S, THE: Sewell.

STORIES FROM AMERICAN HISTORY: Edward
S. Ellis.

STORY HOUR, THE: Wiggin.

STORY OF BARRY AND OTHER ST. BERNARD
DOGS, THE.

STORY OF LAFAYETTE, THE: Margaret J. Codd.

STORY OF OUR COUNTRY IN PROVERB AND
SONG: J. C. South.

TIMOTHY QUEST: Wiggin.

Sixth Grade.

BIRD'S CHRISTMAS CAROL, THE: Dwiggin.

FRIENDS AND HELPERS: Eddy.

GEMS OF LITERATURE, LIBERTY AND PATRIOT-
ISM: De Vere.

JACKANAPES: Ewing (D. C. Heath).

LITTLE DAFFY DOWN DILLY: Hawthorne.

MARGARET OF NEW ORLEANS: Sara Cone Bryant.

PATSY: Dwiggin.

PETER COOPER: Biography.

PLANTING OF THE APPLE TREE, THE: Bryant.

POOR RICHARD'S ALMANAC.

PSALM OF LIFE: Longfellow.

ROBERT OF SICILY: Longfellow.

ROBERT OF SICILY: Sara Cone Bryant (Stories to tell Children).

SPRAGUE'S CLASSIC READER, Book V.: The Saving of "Bones," Love's Sacrifice.

STORIES: Damon and Pythias, The Sword of Damascus, Alexander and Diogenes, Regulus.

STORY OF A SHORT LIFE: Balliet (D. C. Heath).

WASHINGTON'S RULES OF BEHAVIOR.

WASTE NOT, WANT NOT STORIES: (Johnson) (American Book Company).

Seventh Grade.

CRICKET ON THE HEARTH, THE: Dickens.

CHRISTMAS CAROL: Dickens.

GREAT STONE FACE, THE: Hawthorne.

HERO STORIES FROM AMERICAN HISTORY: Blaisdell.

ISLE OF LONG AGO, THE: Taylor.

KING OF THE GOLDEN RIVER, THE: Ruskin.

NATHAN HALE: Finch.

STORIES: Richard Cœur-de-Lion, Blondel, Bayard, Saladin.

WAY TO HEAVEN, THE: J. G. Holland.

Eighth Grade.

- AMERICAN BOOK OF GOLDEN DEEDS : Baldwin.
BLUE AND THE GRAY, THE : Finch.
CHAMBERED NAUTILUS, THE : Holmes.
CHILDREN OF THE TENEMENTS : J. A. Riis.
GOLDEN DEEDS : Charlotte Yonge.
LIVES AND STORIES WORTH REMEMBERING :
 Kupfer (A. B. Co.).
MAN WITHOUT A COUNTRY, THE : Hale.
POCKET RIFLE, THE : Trowbridge (all of
 Trowbridge's are good).
SANDALPHON : Longfellow.
STORIES FROM LIFE : Marden (A. B. Co.).
STORIES OF DARING DEEDS : Youth's Com-
 panion Series.
THANATOPSIS : Bryant.
THE ARTHURIAN LEGEND.
TRUE BIRD STORIES : Miller (Houghton,
 Mifflin and Co.).
TRUE CITIZEN, THE : Smith.
VISION OF SIR LAUNFAL, THE.

20. METHODS AND SUGGESTIONS

Maxims, proverbs, and sayings are the hived wisdom of the ages. They represent human experience boiled down to sentences. They are morality in the form of tablets. A good many of these have been turned out by the race in past times. We ought to get acquainted with them.

We are often called upon to make decisions at the crack of the pistol. The maxim is about the best thing in existence for such emergencies. Maxims, sayings, adages, and apothegms should be planted in the minds of the young at all the cross-roads of temptation to act as guides to them when they stand pondering which way to go. A maxim should be associated with every important subject. And when the subject comes up the maxim will appear spontaneously to point the way, like a beacon at night. This was Kant's idea of the way morals should be taught.

It is a truth pretty well established by both experience and analogy that you can't get blood out of a turnip. Don't expect to be successful in teaching anything until you have acquired some knowledge and understanding of the subject you purpose to present.

The pedagogy of ethical culture is not different in kind from the pedagogy of any other subject.

First knowledge; then the same enthusiasm and ingenuity which insure success in teaching algebra or geography will insure success in teaching the science and art of correct conduct.

The same laws of economy and specialization which have brought about departmental teaching in other subjects will in time bring about departmental teaching in ethics.

In the study and discussion of animals that do not reside in the locality pictures may be used, just as pictures and maps are used in geography as substitutes for absent parts of the earth.

The *Question* is one of the best devices ever invented for the teacher. It provokes thought. It is a challenge. It assigns tasks. It starts the mind on expeditions which it never would think of undertaking without invitation.

Talk *with* children, not *to* them. Induce them to ask questions, tell stories, and relate experiences. Make them feel that they are factors in doing humane work.

Teach the young to compare their ideas with others on the various doctrines in the midst of which they find themselves. Many persons have been led to discard opinions, by which they otherwise would have been handicapped all their lives, by being called upon accidentally to take the other side in debate.

The lives of great and good men have a powerful effect on the young. The mind has models and ideals. When we read of the struggles and triumphs of the great and good, we are instinctively inclined to do as they did. Use the biography.

An important thing to bear in mind in dealing with good and bad is to keep the good that is in men busy and the bad idle.

In schools where there are a number of teachers the work of instruction can be economized by grouping the pupils for the ethical lesson. Many subjects can be presented to two hundred about as easily as to twenty. By shifting the teachers each time to different groups, the same lesson may be given in time to the whole school. There is, however, in this method a loss in the personal element of the teaching.

It is no longer a question of whether ethical culture should be taught in the schools or not, or whether it can be taught. We have passed that stage. We have *got* to teach it. It is a "ground-hog case." The question before us now is regarding the best methods of teaching it.

The following extracts are from suggestions accompanying the course of study in ethical culture used in the Chicago elementary schools:—

"Material suitable for ethical culture work is found in abundance in connection with the

regular school work. More than half the selections in the regular readers contain exactly what is required. The pictures in the primer are excellent for this purpose. In the supplementary reading and library books the material is practically inexhaustible. Nature study, history and civics afford occasions for practical work. The work also blends easily and naturally with the exercises at the opening of school, with Friday afternoon, holiday and Arbour and Bird Day exercises, and with memory gems and songs."

"A good deed done or told gives joy to children; a bad deed is hateful. Thus their feelings influence their judgment. For this reason the story is the best means for making strong and lasting impressions."

"A feeling does not grow into a habit unless there are occasions for its exercise in actual deeds with consequent joy to the doer. The school life affords opportunities for such exercise, and other occasions may be created or suggested, but such occasions should not be obviously made."

"When under the care of a good teacher children's tendencies in the school life are toward honesty, obedience, attention to duty, respect for the rights of others, self-control, etc. If long under a good teacher, habits of right doing and right feeling are formed. For the most part this influence of the teacher cannot be analyzed or attained by conscious effort, but it is the strongest and most vital of all the influences of the school."

The teacher should be a perfume as well as a tonic.

A school should be a great improvement association for the community in which it exists. Boys especially are often disposed to ally themselves with the lawless and deteriorating influences in society. This must not be. The influence of the school should be constructive—for peace and order and the improvement and beautification of the community.

There are certain subjects—like history, literature, civics, nature study, biology, psychology and hygiene—where it is especially easy to introduce the most impressive lessons in ethical and character culture. In teaching ethics it is best not to be too direct about it. “Don’t spread your net in sight of the bird.”

The old method of teaching morals was dogmatic—“Thou shalt” and “Thou shalt not.” It was a method well suited to the simple-minded children of the vanished centuries. But it is a failure to-day. And it is destined to give way to one based on science and reason. Dogmatism is adapted only to the pre-rational period of credulity—the period of racial and individual infancy, when the mind accepts everything that is offered to it. As information grows and the rational powers develop authority must give way more and more to appeals to the understanding. This is the Age of Science. Men must be

"shown." Dogmatic ethics is a pyramid standing on its apex, while the ethics of evolution reposes on the broad and immutable foundations of biology, sociology, psychology, and history.

"The depicting of worthy character and the imitating of noble example tend to make one noble. Did you never observe how imitation, beginning in early youth, at last sinks into the constitution and becomes a second nature of body, voice, and mind?"—*Plato*.

"Refuse to express a passion and it dies. Count ten before venting your anger, and its occasion seems ridiculous. Whistling to keep up courage is no mere figure of speech. On the other hand, sit all day in a moping posture, sigh and reply to everything in a dismal voice, and your melancholy lingers. There is no more valuable precept in moral education than this: if we wish to correct evil tendencies in ourselves, we must assiduously and, at first, cold-bloodedly go through the outward movements of those opposite tendencies which we wish to cultivate. The reward of persistency will infallibly come in the fading out of the sullenness and depression and the advent of real cheerfulness and kindliness in their stead."—*James*.

"The law of physical development is true of moral development. Our souls, like our bodies, grow into the modes in which they are exercised. It is by striving to act that our desires come to a

fuller, more persistent, and more definite development. It is by repetition of action that the corresponding desires are organized into habits.

But the formation of habits requires time—time for action and time for rest. The persevering youth may wake up some fine morning to find himself one of the capable ones of his generation or in the strong grip of some stealthy vice.”—*MacCunn.*

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